FACULTY OF SCIENCE ACADEMIC COMMITTEE

Minutes of the meeting held on 23 January, 2018, at 3:00 p.m. in Arts Council Room, Arts 160.

PRESENT: Associate Dean Axel Hundemer (Acting Chair), Director Nicole Allard (Acting

Vice-Chair), Professors Gail Chmura, Maxime Denis, Michael Hendricks, Daniel Kirshbaum (in place of Timothy Merlis), Michael Langer, Greg Marczynski, Anthony Mittermaier, Johanna Neslehova, Ana Nyzhnyk, Gillian O'Driscoll, Jeanne Paquette, Kathy Roulet; Natalie Waters; Riley Bowker, Candace Yang,

Simona Bene Watts; Lina Alvarez, Josie D'Amico.

GUESTS: Ryan Bouma, Fergus Grieve, Professor Monroe Cohen.

REGRETS: Dean Bruce Lennox, Professors Huy Bui, Barbara Hales, Kenneth Ragan;

Alexandra McCallum, Michael Wolman, Nathaniel Leitao, Lia Huo.

DOCUMENTS: AC-17-41 to AC-17-68

Associate Dean Hundemer called the meeting to order at 3:05 p.m., and welcomed members to the first meeting of 2018.

Associate Dean Hundemer welcomed Mr. Fergus Grieve, who is the Faculty of Science Communications Strategist.

(1) ADOPTION OF AGENDA

An additional item, MATH 348 (AC-17-68), to be added after MATH 228 (AC-17-58), under Item #7, Mathematics & Statistics.

Prof. Chmura **moved**, seconded by Prof. Paquette, that the amended Agenda be adopted.

The motion carried.

(2) MINUTES OF 21 NOVEMBER 2017

Prof. O'Driscoll **moved**, seconded by Prof. Paquette, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

Two Computer Science proposals that were tabled at the Academic Committee meeting held on 21 November 2017 will be discussed under Item #8 of the current Agenda.

(4) <u>NEUROSCIENCE</u>

- Program Changes
Honours in Neuroscience
Major in Neuroscience

AC-17-42 AC-17-43 The proposed program changes were to add COMP 204, Computer Programming for the Life Sciences, as an alternate course to COMP 202, and to add three Complementary upper-level courses to the above Major and Honours Programs in Neuroscience.

Prof. Hendricks **moved**, seconded by Prof. O'Driscoll, that the changes be approved.

The motion carried.

(5) BIOCHEMISTRY

New Course:

BIOC 219 Writing in Biomedical Sciences AC-17-44

1 credit

- Prof. Denis introduced a new writing course, BIOC 219, which will serve as a prerequisite to BIOC 220, a U1 laboratory course. Associate Dean Hundemer raised a number of concerns:
- (i) since BIOC 219 will be offered in the Fall semester and BIOC 220 will be offered in the Winter semester, would it be better to teach BIOC 219 concurrently with BIOC 220, or incorporate BIOC 219 into BIOC 220, given that students have never written a laboratory report and would have had no significant prerequisites prior to taking BIOC 219? Prof. Denis replied that students would be given general data to generate a mock laboratory report;
- (ii) if students fail BIOC 219, would students be eligible to take BIOC 220? Prof. Denis confirmed that students would be able to register for BIOC 220 with the permission of the instructor and/or that students could write the supplemental examination. Associate Dean Hundemer explained that since students cannot be required to write a supplemental examination, he felt that retaking the course would be a much better option instead;
- (iii) that an in-class final examination worth 50% of the final grade was very unusual for a writing course and a better format would be to assess students by writing a mock report. Prof. Denis responded by saying that the final examination would comprise a mock laboratory report with some multiple choice questions.
- Director Allard pointed out that, according to the Student Assessment Policy, **inclass** final examinations could not be worth 50% and that the examination would have to be written during the formal final examination period, where students are given three hours to write their examination. Also, the policy states that it is forbidden to hold final examinations counting for 50% of a grade during the last 14 days prior to the formal examination period. With regard to the prerequisites for BIOC 219, Director Allard asked that (i) the prerequisites be specified with course numbers; and (ii) the restrictions should be clarified to read:

Restricted to students registered in the Biochemistry Liberal, Major and Honours programs and to students in the Interdepartmental Honours Program in Immunology (IHI). Other students will be admitted with permission of the instructor.

After some questions and answers, Prof. Denis added that, depending on the results of the first run of BIOC 219, it may be possible to offer BIOC 219 as a prerequisite and a co-requisite in future years.

Prof. Denis **moved**, seconded by Prof. Neslehova, that the course be adopted with the above modifications.

The motion carried.

BIOC 220 Lab Meth in Biochem&MolBiol 1

Change in prerequisite AC-17-44A

Prof. Denis **moved**, seconded by Prof. Langer, that the above change be approved.

The motion carried.

- Program Changes:

Honours in Biochemistry

Major in Biochemistry

AC-17-45

AC-17-46

Liberal – Core Science Component in Biochemistry

AC-17-47

- BIOC 219 was added as a Required course, and COMP 202 was replaced with COMP 204, Computer Programming for the Life Sciences, as a Complementary course to the above Biochemistry programs. The program credit weight was increased by one credit for all three programs.
- The program revision forms should read COMP 204 instead of COMP 364 since the latter course will be retired.

Prof. Denis **moved**, seconded by Prof. Chmura, that the above programs be approved.

The motion carried.

(6) MICROBIOLOGY & IMMUNOLOGY

New Course:

MIMM 301 Scientific Writing Skills-MIMM AC-17-48

1 credit

- Prof. Marczynski described the above new U2 writing course for students in Microbiology & Immunology Programs. MIMM 301 has been proposed for two reasons:
 - (i) for many years a similar writing course was embedded in a laboratory course (MIMM 384, three credits), but students found it very challenging given the credit weight;
 - (ii) to allow students to become engaged directly with professors, one-on-one. The course aims to prepare students by providing the skills and knowledge needed for their future careers and to significantly improve the student experience.

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

The motion carried.

New Course:

MIMM 496 Microbiology Adv Res Project AC-17-49

6 credits

New Course:

MIMM 497 Immunology Adv Res Project AC-17-50

6 credits

Prof. Marczynski explained that the two new above-mentioned undergraduate research courses will provide students research opportunities beyond what a one-semester course (MIMM 396/MIMM 397) could offer. They are also for students who are unlikely to take the Honours Research Project course (MIMM 501/MIMM 502). MIMM 496 and MIMM 497 were created because students were taking both MIMM 396 (for Microbiology projects) and MIMM 397 (for

Immunology projects) back-to-back.

Associate Dean Hundemer pointed out that the wording under the Instructional Method in the course outline should be rewritten to clearly state that students will be supervised by the principal investigator.

Following a short discussion about departmental procedures concerning having research reports evaluated by the supervisor as well as by one other professor, Prof. Marczynski agreed to revise the method of evaluation.

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

The motion carried.

- Program Changes:

Honours in Microbiology & Immunology

AC-17-51

Major in Microbiology & Immunology

AC-17-52

- The changes to the Major and Honours Program in Microbiology and Immunology were:
 - (i) the reduction of the program credit load by removing a Required course, BIOC 312;
 - (ii) the addition of the three new above-mentioned courses, as well as further MIMM courses to allow for more flexibility;
 - (iii) the inclusion of other relevant courses; and the replacement of COMP 364 with COMP 204.

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

The motion carried.

Due to the proposed increase in program credit weight, the following item was tabled to a future Academic Committee meeting:

Liberal – Core Science Component in Microbiology & ImmunologyAC-17-53

- Program Changes:

Interdepartmental Honours Program in Immunology (IHI) AC-17-54

The changes include the rewording of the program description to more accurately describe the program, the addition of U2 Complementary courses (MIMM 384 and MIMM 385), and three other relevant U3 Complementary courses.

It was pointed out that, under the list of U2 Complementary courses, COMP 204 should be added as an alternate to COMP 202.

Prof. Marczynski **moved**, seconded by Prof. Langer, that the above program be approved with the above-mentioned addition of COMP 202.

The motion carried.

(7) MATHEMATICS & STATISTICS

MATH 240 Discrete Structures 1 AC-17-55

Change in restrictions

3 credits

507.1 Prof. Neslehova said that the proposed change in restrictions will formally allow Engineering students to take MATH 240.

MATH 417 Linear Optimization AC-17-56

Changes: title, description, restrictions

3 credits

New Course:

MATH 517 Honours Linear Optimization AC-17-60

4 credits

Course Retirement.

MATH 487 Honours Math Programming AC-17-57

3 credits

Prof. Neslehova explained that MATH 417, MATH 517 and MATH 487 are related courses on linear optimization. The changes were initiated by a new instructor teaching the courses. MATH 517 (Honours version of MATH 417) will replace MATH 487, and will be cross-listed with MATH 417; MATH 487 will be retired.

Prof. Neslehova **moved**, seconded by Prof. Langer, that the two new above-mentioned courses and course retirement be approved.

The motion carried.

New Course:

MATH 228 Classical Geometry AC-17-58

3 credits

MATH 348 Euclidean Geometry AC-17-68

3 credits

Changes: title, description, restrictions

New Course:

MATH 398 Honours Euclidean Geometry AC-17-59

3 credits

- Prof. Neslehova said that the three above-mentioned courses are a cluster of geometry courses.
- **MATH 228**: A new course will now be taught specifically to students in the Secondary Mathematics program in the Education degree, since MATH 348 will be taught at a higher level in the future.

MATH 398: A new course intended for students in the Honours programs, and will share the same lectures with MATH 348

507.5 She said that Geometry is not normally offered in high school. MATH 348 and MATH 398 will be offered to students in the Mathematics & Statistics programs.

Prof. Neslehova **moved**, seconded by Prof. Chmura, that the two new above-mentioned courses and course revision be approved.

The motion carried.

- Program Changes:

B.Sc. Major in Statistics & Computer Science

AC-17-61

The minor revisions aim to clarify the prerequisites MATH 223 and MATH 236. These courses are equivalent as prerequisites for some of the required and complementary Computer Science courses in the program.

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

The motion carried.

- Program Changes:

B.Sc. Liberal – Core Science Component in Statistics

AC-17-62

- New Program:

B.Sc. Major in Statistics

AC-17-63

- Prof. Neslehova described the changes in the B.Sc. Liberal Core Science Component in the Statistics program. She said some of the changes were being proposed to add more statistical content and to align the program with the proposed new B.Sc. Major Program in Statistics (AC-17-63).
- There is a demand among students for the Major Program in Statistics and there are job opportunities. In addition, students will gain the appropriate background to enter graduate schools.
- Both the Liberal and the new Major will offer students appropriate courses to obtain A.Stat professional accreditation from the Statistical Society of Canada.

Prof. Neslehova **moved**, seconded by Prof. Chmura, that the program revisions and the new program be approved.

The motion carried.

(8) COMPUTER SCIENCE

- Program Changes:

B.A. & Sc. Major Concentration in Computer Science AC-17-64
B.Sc. Liberal – Core Science Component in Computer Science AC-17-65

Following a discussion at the Academic Committee meeting held on 21 November 2017 about removing MATH 222 from the above programs, MATH 222 has been reinstated as a Complementary course among two sets of calculus- or algebra-related courses and simultaneously will provide options.

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

The motion carried.

- For Information Only

B.A. Major Concentration in Computer Science

(9) **GEOGRAPHY**

GEOG 420 Memory, Place, and Power AC-17-66

Changes: description, prerequisites, restrictions

3 credits

In response to SCTP's request, the changes in description, prerequisites and restrictions were made to be consistent with those of POLI 420.

Prof. Chmura **moved**, seconded by Prof. O'Driscoll, that the changes be approved.

The motion carried.

(10) PSYCHOLOGY

PSYC 502 Psychoneuroendocrinology AC-17-67

Description of change; prerequisite

3 credits

The proposed change in description was due to there being a new instructor teaching PSYC 502. Also, the prerequisite course PSYC 308 has not been offered for many years, and it has been replaced with NSCI 201.

Prof. O'Driscoll **moved**, seconded by Prof. Hendricks, that the changes be approved.

The motion carried.

(11) SUS REPORT

There was no report from the SUS.

(12) OTHER BUSINESS

There being no further business, the meeting adjourned at 4:30 p.m.