

**FACULTY OF SCIENCE  
ACADEMIC COMMITTEE**

Minutes of the meeting held on 24 April 2018 at 3:00 p.m. in Arts Council Room, Arts #160.

**PRESENT:** Associate Dean Axel Hundemer (Chair), Director Nicole Allard (Vice-Chair); Professors Huy Bui, Maxime Denis, Barbara Hales, Michael Hendricks, Michael Langer, Greg Marczynski, Timothy Merlis, Anthony Mittermaier, Johanna Neslehova, Ana Nyzhnyk, Gillian O'Driscoll, Jeanne Paquette, Kenneth Ragan, Kathy Roulet; Natalie Waters; Riley Bowker; Lina Alvarez, Josie D'Amico.

**REGRETS:** Dean Bruce Lennox, Professors Gail Chmura; Simona Bene Watts, Ellie Joung, Nathaniel Leitao, Lia Huo, Alexandra McCallum, Michael Wolman, Candace Yang.

**DOCUMENTS:** AC-17-87 to AC-17-98; AC-17-102 to AC-17-116

On behalf of Dean Lennox, Associate Dean Hundemer welcomed members to the last Academic Committee meeting of the 2017-2018 academic year, and called the meeting to order at 3:00 p.m.

**(1) ADOPTION OF AGENDA**

One additional item, COMP 499 (Course retirement, Document #AC-17-116), will be considered after Item #12 of the Agenda.

Prof. Ragan **moved**, seconded by Prof. Denis, that the amended Agenda be adopted.

**The motion carried.**

**(2) MINUTES OF 27 MARCH 2018**

**AC-17-87**

Prof. Denis moved, seconded by Prof. Ragan, that the Minutes be approved.

**The motion carried.**

**(3) BUSINESS ARISING FROM THE MINUTES**

There was no business arising from the Minutes.

**(4) BIOLOGY**

***New Course:***

BIOL 414

Invert. Brain **Microcircuits**  
3 credits

**AC-17-88**

Prof. Hendricks explained that BIOL 414 was being proposed by a new faculty member in the Department of Biology, as there is no previous relevant 400-level course in this area. BIOL 414 will serve as a Complementary course in the Neurobiology stream in the Biology programs, as well as the Major and Minor Programs in Neuroscience.

In response to a member who asked whether the title should be Invert. Brain Microcircuits or Invert. Brain Circuits, Prof. Hendricks said he would consult with the instructor of the course.

Associate Dean Hundemer said that, concerning the method of evaluation for the course, participation will count for 10% of the final grade. Since participation is partly subjective, and since students have the right to contest any grade, it is important that participation be measured. The two options are either to reduce the participation weight to less than 10%, or if it is 10% or greater, a detailed rubric for grading class participation must be provided. One member said she valued

giving grades for participation because it shows that students are getting involved, whereas if no grades are given for participation, there is no motivation to get involved. Director Allard pointed out that undergraduates could go through their entire undergraduate program without having a participatory-type course. A participation grading rubric explaining to students ahead of time what is expected of them is beneficial to both students and instructors. Another member was concerned about the specification in the course syllabus under "Conference Participation" (10%) that a grade of "J" would be given if students miss three or more conferences without justification. Director Allard explained that a "J" grade is normally given if a student does not complete the final exam/take-home exam, or if a course requirement worth 70% of the final mark is missing. A sample grading rubric will be sent to Prof. Hendricks.

Prof. Hendricks **moved**, seconded by Prof. Paquette, that the course be adopted, pending a detailed participation grading rubric if the participation weight is 10%, and that the course syllabus be revised in light of the points raised above.

**The motion carried.**

BIOL 304	Evolution	<b>AC-17-89</b>
	Changes: course activities, description	
	3 credits	

Prof. Hendricks said that the course description was being updated to better reflect the course content, and that the course hours (from three one-hour lectures/week to two one-hour lectures plus a three-hour laboratory class) were being changed to give students more practical experience in observing and estimating variation and selection in the labs in the collections of the Redpath Museum.

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

**The motion carried.**

BIOL 395	Quantitative Biology Seminar	<b>AC-17-90</b>
	Changes: title, prerequisites, corequisites, restrictions	
	3 credits	

Prof. Hendricks described the changes to BIOL 395. The prerequisites were being revised to include students in all the interdisciplinary programs. PHYS 230 was being removed as a prerequisite course.

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

**The motion carried.**

(5)	<b><u>BIOLOGY/PHYSICS</u></b>		
	BIOL 319/PHYS 319	Introduction to Biophysics	<b>AC-17-91A/91B</b>
		Change in prerequisites	
		3 credits	

Prof. Ragan said that the double-prefix course BIOL 319/PHYS 319 would now include BIOL 219 as an alternate prerequisite course (for BIOL 200), which is a required course for students in the interdisciplinary biophysics programs.

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

**The motion carried.**

(6) **PHYSICS**

PHYS 519                      Advanced Biophysics                      **AC-17-92**  
Change in prerequisites  
3 credits

Prof. Ragan said that PHYS 329 and MATH 437 were being added as alternate prerequisite courses for PHYS 519 to rectify hidden prerequisites for two programs: (i) Major in Physiology & Mathematics Program and (ii) Honours Program in Physics: Biological Physics Option.

Prof. Ragan **moved**, seconded by Prof. Mittermaier, that the changes be approved.

**The motion carried.**

**(7) MATHEMATICS & STATISTICS**

***New Course:***

MATH 583                      Geometric Group Theory                      **AC-17-93**  
4 credits

Prof. Neslehova said that the topics of the proposed course, MATH 583, have been taught for the past three years by a research team in geometric group theory as a topics course, MATH 599, and now it is being proposed as a formal course in this up-and-coming field. The course would provide better visibility to their expertise in geometric group theory, and a similar course is being taught in other universities.

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

**The motion carried.**

MATH 466                      Honours Complex Analysis                      **AC-17-94**  
Changes in number [from -366]; restrictions  
3 credits

Prof. Neslehova explained that other courses, Honours Analysis 3 & 4, Honours Algebra 3 & 4, and Honours Differential Geometry had previously been promoted from the 300-level to the 400-level, but MATH 366 was inadvertently omitted. The proposed change in course level will rectify this omission.

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

**The motion carried.**

**- B.Sc. Program Changes:**

Honours in Mathematics                      **AC-17-95**  
Honours in Applied Mathematics                      **AC-17-96**  
Honours in Mathematics & Computer Science                      **AC-17-97**

MATH 222 was being added to the above programs to explicitly state that it is a Required course for students who have not taken an equivalent of MATH 222 previously.

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

**The motion carried.**

**(8) GEOGRAPHY**

GEOG 351                      Quantitative Methods                      **AC-17-98**  
Changes in prerequisites  
3 credits

Associate Dean Hundemer said that the eCalendar lists the prerequisite as MATH 203 (Principles of Statistics) or permission of the instructor, but that the Department of Geography would prefer that Geography students take its own introductory statistics course, GEOG 202, since it covers specific material in Geography which is not covered in other statistics courses in the university.

Associate Dean Hundemer **moved**, seconded by Prof. Paquette, that the changes be approved.

**The motion carried.**

**(9) PSYCHOLOGY**

PSYC 328	Health Psychology Change in course activities, prerequisites 3 credits	<b>AC-17-102</b>
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Prof. O'Driscoll said that the proposed revised prerequisites for PSYC 328 would offer students a background in Social Psychology and Cognition to succeed in PSYC 328.

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

**The motion carried.**

**(10) BIOCHEMISTRY**

<b>- Program Changes:</b>		
Honours in Biochemistry		<b>AC-17-103</b>
Major in Biochemistry		<b>AC-17-104</b>
Liberal – Core Science Component in Biochemistry		<b>AC-17-105</b>

Prof. Denis described the above program revisions. The addition of COMP 204 (Computer Programming for Life Sciences) provides students in the field of biomedical sciences with a more appropriate course than COMP 202. Also, MIMM 214 will be moved from the U3 to the U1 list of Complementary courses, offering more choices to U1 students.

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

**The motion carried.**

**(11) PHYSIOLOGY**

PHGY 515	Blood-Brain Barrier: Hlth & Dis Changes: title, description, prerequisites	<b>AC-17-110</b>
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Prof. Nyzhnyk explained that the changes in title and description better reflect what will be taught in PHGY 515, and that the change in prerequisites offered students the appropriate course content required for PHGY 515. There was some discussion about the weight of class participation, and, as previously discussed (above) for BIOL 414, about a detailed grading rubric if participation is worth 10% or more, which must be provided prior to final approval of the course. The other option would be to reduce the class participation to less than 10%.

Prof. Nyzhnyk **moved**, seconded by Prof. O'Driscoll, that the changes be approved, pending a detailed participation grading rubric if the participation weight is 10%.

**The motion carried.**

PHGY 516                      Physiology of Blood                      **AC-17-111**  
Change in title

The change in title for PHGY 516 was due to the change in title for PHGY 515.

Prof. Nyzhnyk **moved**, seconded by Prof. Ragan, that the changes be approved.

**The motion carried.**

**- Program Changes:**

Honours in Physiology                      **AC-17-112**  
Major in Physiology                      **AC-17-113**  
Liberal – Core Science Component in Physiology                      **AC-17-114**

Prof. Nyzhnyk said that the proposed revisions to the above courses were to replace COMP 202 with COMP 204 (Computer Programming for Life Sciences), and other minor housekeeping changes.

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

**The motion carried.**

Major in Physiology & Mathematics                      **AC-17-115**

The revision to the above Major Program in Physiology & Mathematics was to remove COMP 202 and replace it with COMP 204.

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

**The motion carried.**

**(12) FACULTY OF ENGINEERING, ELECTRICAL & COMPUTER ENGINEERING**

**- Program Changes:**

B.Sc. Minor in Electrical Engineering                      **AC-17-106**  
***New Courses - for information only***  
ECSE 206                      Intro to Signals and Systems                      **AC-17-107**  
ECSE 331                      Electronics                      **AC-17-108**  
ECSE 335                      Microelectronics                      **AC-17-109**

Associate Dean Hundemer said that the proposed changes were due to the curriculum revisions made in 2015 to the Electrical Engineering programs. The new courses that were introduced will replace the old courses in the program. Director Allard said that, according to the revised program description of the Minor, it was not clearly specified whether (i) PHYS 241 is equivalent to another course in the Minor, and (ii) PHYS 328 and ECSE 335 are equivalent courses; further clarification is required from the Faculty of Engineering and the Department of Physics.

**(13) COMPUTER SCIENCE**

COMP 499                      Ugrad Bioinformatics Seminar                      **AC-17-110**  
Course retirement  
3 credits

Prof. Langer said that COMP 499 is being retired because it is no longer part of any program. This course has been replaced with BIOL 395 (Quantitative Biology Seminar 1).

Prof. Langer **moved**, seconded by Prof. Ragan, that the course retirement be approved.

**The motion carried.**

**(14) OTHER BUSINESS**

Associate Dean Hundemer thanked the members of the Academic Committee for their hard and diligent work during this academic year, and he wished members a great summer.

There being no further business, the meeting was adjourned at 4:00 p.m.