

**FACULTY OF SCIENCE
ACADEMIC COMMITTEE**

Minutes of the meeting held on February 25, 2014 at 3:00 p.m. in Arts Council Room, Arts 160.

PRESENT: Dean Martin Grant (Chair), Associate Dean Laurie Hendren (Vice-Chair), Director Nicole Allard, Professors Thomas Bureau, Vojkan Jaksic, Bettina Kemme, Daniel Kirshbaum, Justin Kollman, Greg Marczynski, Ana Nyzhnyk, Gillian O'Driscoll, Kenneth Ragan (in place of Guy Moore), Kathy Roulet, Amy Szuchmacher Blum; Sara Holder; Emily Stewart, Josie D'Amico, Malek Yalaoui.

VISITOR: Mr. Victor Chisholm, Undergraduate Research Officer, Professors Shelton Hendricks, Axel Hundemer, Neil Price, Jon Sakata, David Wolfson.

REGRETS: Professors Lea Berrang Ford, Barbara Hales, Julie St-Pierre, Anthony Williams-Jones; José Manuel Ceppi, Gregory Johnston, Caitlin Loo, William (Bill) Motsch, Alexander Norton, Tian (Peter) Zhi.

DOCUMENTS: AC-13-61 to AC-13-82

In the temporary absence of Dean Grant, Associate Dean Hendren called the meeting to order at 3:05 p.m.

(1) ADOPTION OF AGENDA

Prof. O'Driscoll **moved**, seconded by Prof. Ragan, that the Agenda be adopted.

The motion carried.

(2) RESULTS OF ELECTRONIC MEETING OF JANUARY 28, 2014 AC-13-61

602.1 Associate Dean Hendren said an electronic meeting had been held on January 28, 2014 because of the low number of proposals to be considered. However, it was important to examine the proposals in order for them to be moved along on the approval path. No-one voiced any objection to having an electronic meeting.

602.2 Associate Dean Hendren thanked members for submitting comments about the Proposed Revisions to the Policy on Course Evaluations (Document AC-13-59). The proposal had also been discussed at a Chairs meeting, and a summary of the comments had been submitted to Teaching & Learning Services. She said that as a member of APC, a final version of the proposal would be brought to a future APC meeting. She would examine the proposal to ensure that it reflects the Faculty's concerns.

(3) BUSINESS ARISING FROM THE ACADEMIC COMMITTEE MINUTES OF NOVEMBER 26, 2013

- Minutes 303.1 to 303.5, Major in Chemistry

603.1 Prof. Blum said that as part of the review of Chemistry programs, a 300-level course had been recently renumbered to 400 (CHEM 493). The core of the program was still being reviewed with the aim of requiring six credits of Complementary Courses at the 400-level.

- Minutes 303.6, 303.7, Honours, Major, Liberal Programs in Physiology (AC-13-26 to 28)

- 603.2** Prof. Nyzhnyk explained that the above revisions had involved the addition of a number of courses from other units to the programs. The programs had been approved pending receipt of consultations from the units offering these courses. All issues had now been resolved, with only a consultation report to come from the Department of Chemistry.
- 603.3** Prof. Blum said that the Chemistry course to be added was CHEM 302, which was already oversubscribed. The issue of potentially taking in more students would be discussed in the very near future by Chemistry's Curriculum Committee.
- 603.4** Associate Dean Hendren said that the Department of Chemistry could restrict enrolment in the course for non-Chemistry students since it would be a Complementary course for Physiology students.

(4) PARTICIPATION TRENDS IN UNDERGRADUATE RESEARCH COURSES AC-13-62

- 604.1** Mr. Victor Chisholm, Undergraduate Research Officer of the Faculty of Science, said he routinely prepared statistical reports for the Dean. In the last several years, registration in the 396 undergraduate research courses had increased dramatically, and showed no signs of slowing. All B.Sc. departments offer 396-courses, except for the Department of Pharmacology. These courses seem to be a "gateway," with students wanting to continue with other research courses. 396 courses, on paper, are open to students after one term of studies, although in practice very few U0 or U1 students take a 396 course. There are very respectable numbers of U2 students taking 396 courses. Overall research opportunities for students are growing, with 50% of Science students now doing research courses. The percentage of B.Sc. graduates with one or more DMURL courses is rising.
- 604.2** Mr. Chisholm suggested that departments with only a few research courses (e.g., 396 and Honours courses) could consider adding other research courses in order to expand the opportunities for undergraduate research. He asked members to consider ways to create opportunities for U0 and U1 students.
- 604.3** Dean Grant said that while some people might think that U0 and U1 students were not yet capable of doing research, a look at some CEGEP projects will show otherwise.
- 604.4** Dean Grant said that since the representative from Pharmacology was not present at the current meeting, there will be a follow-up regarding a PHAR 396 course.
- 604.5** Dean Grant added that doing an undergraduate research course opens opportunities for students. Mr. Chisholm had been working on the Science undergraduate research courses since 2005, and the success of these had stimulated other universities and faculties to follow the Faculty of Science's lead.
- 604.6** A member suggested that students should take a pro-active approach and seek out professors in whose labs they wished to do undergraduate research. It was pointed out that the Department of Biology provided a list of professors/projects to the McGill Biology Student Union.
- 604.7** Dean Grant thanked Mr. Chisholm for his excellent work.

(5) MATHEMATICS & STATISTICS

Proposed Changes to the Undergraduate Analysis Courses

AC-13-63

605.1 Prof. Jaksic described the proposed changes and explained the reasons for them.

New Course

MATH 254 Honours Analysis 1
3 credits

AC-13-64

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the course be adopted.

The motion carried.

MATH 242 Analysis 1
Restrictions
3 credits

AC-13-65

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 243 Analysis 2
Description
3 credits

AC-13-66

605.2 It was pointed out that **MATH 254** was being added as an alternative prerequisite to MATH 242.

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 255 Honours Analysis 2
Prerequisites, Description
3 credits

AC-13-67

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 354 Honours Analysis 3
Description
3 credits

AC-13-68

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 355 Honours Analysis 4
Description
3 credits

AC-13-69

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 356 Honours Probability AC-13-70
Prerequisites, Corequisites
3 credits

605.3 Prof. Wolfson explained the changes and the reasons for them.

605.4 **Additional changes:**

The prerequisites should read:

MATH 133 **or MATH 134**, and MATH 222 or permission of the Department.

The corequisites should read:

MATH 242 **or MATH 254**

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

MATH 587 Advanced Probability Theory 1 AC-13-71
Prerequisites
4 credits

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

B.Sc. Program Changes:

Proposed Changes to the Undergraduate Honours Program in Probability
and Statistics AC-13-72

605.5 Prof. Jaksic introduced and described the proposed changes.

- Honours in Applied Mathematics AC-13-73

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

- Honours in Mathematics AC-13-74

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

- Honours in Mathematics & Physics AC-13-75

605.6 Associate Dean Hendren pointed out that in the above Honours Mathematics programs, students had a choice between MATH 242 (Analysis 1) and MATH 254 (Honours Analysis 1), and asked why the choice was not offered in the Honours Program in Mathematics & Physics.

605.7 Prof. Jaksic **moved**, seconded by Prof. Ragan, that the changes be approved, pending examination by the Department of Physics of the above discrepancy.

The motion carried.

- Honours in Probability and Statistics **AC-13-76**

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

- Honours in Statistics and Computer Science **AC-13-77**

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

- Joint Honours in Mathematics and Computer Science **AC-13-78**

Prof. Jaksic **moved**, seconded by Prof. Bureau, that the changes be approved.

The motion carried.

B.A. Program Changes – For Information Only

- Honours in Probability and Statistics
- Honours in Statistics and Computer Science
- Joint Honours Component Mathematics

(6) BIOLOGY

New Course:
BIOL 580 Genet Approaches to Neur Syst **AC-13-79**
3 credits

606.1 Prof. Hendricks introduced the above new neurobiology course, which will provide a new neuroscience course to undergraduate and graduate students. This course will be added as a Complementary course to the following programs:

- B.Sc. Major and Honours Programs in Neuroscience
- B.Sc. Major in Biology and Mathematics (Neurosciences Stream)

Prof. Bureau **moved**, seconded by Prof. Kollman, that the course be adopted.

The motion carried.

New Course:
BIOL 598 Advanced Design and Statistics **AC-13-80**
3 credits

606.2 Prof. Sakata introduced BIOL 598, and explained that it was a three-credit version of the separate BIOL 596 (Advanced Experimental Design, 1 credit) and BIOL 597 (Advanced Biostatistics, 2 credits) courses.

Prof. Bureau **moved**, seconded by Prof. Kollman, that the course be adopted.

The motion carried.

BIOL 342	Contemp Topics in Aquatic Ecol Title, Description 3 credits	AC-13-81
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Prof. Bureau **moved**, seconded by Prof. Kemme, that the changes be approved.

The motion carried.

Program Changes:

- Major in Biology

AC-13-82

606.3 Prof. Bureau explained that the changes clarified the minimum and maximum number of credits for the program, rearranged the format of the course lists, and specified that six credits at the 400-level or above were required.

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

The motion carried.

606.4 Associate Dean Hendren said that the Departments of Chemistry and Mathematics & Statistics, and the School of Computer Science were all working on requiring six credits of courses at the 400-level or above for their Major programs.

(7) SUS ACTIVITIES

607.1 Ms. Stewart announced the following:

The AUS and SUS will be holding this year's Departmental Fair on Wednesday, March 12th, 2014, from 10am-3pm in the SSMU Ballroom.

At this event, U0 students will be able to speak to representatives from departments within the Faculty of Arts and Faculty of Science, as well as a number of student services, in preparation for selecting their Major and/or Minor programs by the end of this semester.

Invitations have been extended to the undergraduate advisor or equivalent for each department. If you would like to reserve a table at the event or would like more information, please contact SUS VP Academic Caitlin Loo at academic@sus.mcgill.ca.

607.2 Associate Dean Hendren said that it was important for departments which wished to increase their enrolment to participate in the Fair.

607.3 Dean Grant thanked Ms. Stewart for the above announcement.

(8) OTHER BUSINESS

There being no further business, the meeting adjourned at 3:50 p.m.