

**FACULTY OF SCIENCE
ACADEMIC COMMITTEE**

Minutes of the meeting held on 15 April 2022 at 3:00 p.m. by Zoom Videoconferencing.

DOCUMENTS: AC-21-82 to AC-21-116

Associate Dean Hundemer called the meeting to order at 3 p.m. and welcomed members to the eighth meeting of the Academic Committee.

1. Adoption of Agenda

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

The motion carried.

2. Minutes of 15 March 2022

AC-21-82

Mr. Barry **moved**, seconded by Prof. Nyzhnyk, that the Minutes be approved.

The motion carried.

3. Business Arising from the Minutes

There was no business arising from the Minutes.

4. New Models of Academic Program Delivery (NEWMAD)

Prof, Tamara Western, Linan Chen, Dr. Laura Pavelka

AC-21-109

Prof. Western introduced the New Models of Academic Program Delivery Workgroup introducing Dr. Pavelka (Chemistry), as one of the members of the core work group. NEWMAD will address the question of new ways of teaching by acknowledging current trends, and the use of technologies that allow for flexibility. NEWMAD will consider appropriate methods of assessment, classroom design, as well as lab and experiential learning. The working group was set up in December 2021 consisting of a core set of ten members led by Prof. Christopher Buddle, Associate Provost Teaching and Academic Programs. The working group encourages the McGill community to share ideas and input with a special consideration for student success both academically and post-graduation. Suggestions can be submitted through any of the working group members as well as through online platform.

Prof. Hundemer thanked Prof. Western for the presentation and stated that there was time for discussion should any of the members have questions or comments about NEWMAD. Prof. Denis asked if there will be a member from the Faculty of Medicine for the programs taught in conjunction with the Faculty of Science and if there were plans that would accommodate different types of teaching. Prof. Western could not confirm if a member from the Faculty of Medicine is a member of the working group. Prof. Western stated that feedback is encouraged and that the group will be exploring best practices for teaching in all areas.

Prof. Forest commented that the majority of the working group members are in administration and there isn't enough representation from teaching faculty members. Prof. Western acknowledged this issue and reassured the committee that Dr. Pavelka's

contributions to the committee will serve well in this regard, as well as encouraged feedback from faculty members. Prof. Forest also voiced concern on allowing for integrating departmental autonomy in this process as it was said to be a concern during the pandemic in terms of online learning.

5. Earth & Planetary Sciences

New Course:

EPSC 325	Environmental Geochemistry 3 credits	AC-21-110
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Prof. Paquette presented a new course, EPSC 325, designed for students in Chemistry, Earth System Science, Geography, Geology, Planetary Sciences, and the School of Environment. This course will focus on the interactions between minerals and water, in particular with surface fluids, mostly those crystal in natural solids that make up rocks and also sands. Their composition is also impacted by human activities where they become a part of natural earth materials and interact with surface waters. The course will be launched by Prof. Baker. EPSC 325 will be offered in the Faculty of Science and will complement other courses given in the departments of Chemistry, Earth and Planetary Science, Geography, and the School of Environment.

Prof. Paquette **moved**, seconded by Prof. Dufour, that the course be adopted.

The motion carried.

6. Computer Science

COMP 551	Applied Machine Learning	AC-21-110
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Changes: Due to similar content COMP 551 students will no longer be allowed to take ECSE 551
4 credits

Prof. Verbrugge explains that GCSE 551 contains a restriction making it known that it is mutually exclusive with COMP 551.

Prof. Verbrugge **moved**, seconded by Prof. Haggard, that the change be approved.

The motion carried.

New course:

COMP 604	Graduate School Fundamentals 1 credit	AC-21-112
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Prof. Verbrugge presented a new course COMP 604, designed as a general graduate school skills course aimed at PhD students. Prof. Balmau described COMP 604 as a course developed to teach graduate students the soft skills needed to have a good experience in graduate school. Topics include what constitutes good research in Computer Science, how to work well in a lab and communication skills. Prof. Balmau added that in addition to accepting PhD students, registrations from Master's students are also welcome. The course also aims at providing graduate students with a common cohort and a community spirit. Lastly, this course is specific to Computer Science and does not aim to replace professional courses already offered by the University.

Prof. Verbrugge **moved**, seconded by Prof. Dufour, that the course be adopted.

The motion carried.

7. Mathematics & Statistics

New Course:

MATH 518

Introduction to Algebraic Geometry
4 credits

AC-21-113

Prof. Vetois presented a new course MATH 518 Introduction to Algebraic Geometry, a course offered in other major universities and is expected to have steady enrolment based on demand from both undergraduate and graduate students.

Prof. Vetois **moved**, seconded by Prof. Forest, that the course be adopted.

The motion carried.

B.Sc. Program Changes

- Honours in Probability & Statistics

BA Program Changes

Prof. Vetois presented a revision in the Honours in Probability and Statistics program. Changes include the revision of complimentary courses in order to allow more feasibility for the students to complete the program as well as to complete the new courses in optimization and machine learning. Advising notes have been added to display these changes.

Prof. Vetois **moved**, seconded by Prof. Vurbrugge, that the changes be approved.

The motion carried.

8. Physics

Program Changes

Major in Physics

AC-21-86

Prof. Haggard explained the objective to the change in the Major in Physics. The change includes opening a two-term research course to both the Honours and Major students to allow students for a more continuous and comprehensive research project

Prof. Haggard **moved**, seconded by Prof. Gerhold, that the changes be approved.

The motion carried.

9. Bachelor of Arts and Science

- Calendar: BASC 201 course and Departmental Requirements

AC-21-116

Associate Dean Hundemer explained that with the growth of the program a change in the course requirements portion of the calendar is being proposed. The integrative course BASC 201 will no longer be required for BASc students an in Interfaculty program. This will reduce enrolment pressure on BASC 201.

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

The motion carried.

10. Other Business

There being no further business, Prof. Denis **moved**, seconded by Prof. Kelome, that the meeting be adjourned at 4:17 p.m.

The motion carried.