FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, December 2, 2014
Leacock Council Room – L232

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-14-10 to S-14-11

Dean Grant called the meeting to order at 3:00 p.m.

Dean Grant invited members to the annual Christmas Party, which will be held at 4:00 p.m. on 11 December 2014 in the Ballroom of Thomson House.

(1) ADOPTION OF AGENDA

Dean Grant moved, seconded by Prof. Roulet, that the Agenda be adopted.

The motion carried.

(2) MINUTES OF OCTOBER 21, 2014

Dean Grant moved, seconded by Prof. Damha, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(4) REPORT OF COMMITTEE

- Academic Committee

The Academic Committee approved the following on Tuesday, October 28, 2014 and Tuesday, November 25, 2014.

I. MEETING OF OCTOBER 28, 2014

Courses and Programs

1. Physics
   PHYS 447 Applications of Quantum Mech. AC-14-9
   Changes: course number [from -436], title, restrictions
   3 credits

   404.1
   Associate Dean Western explained the changes.

   Associate Dean Western moved, seconded by Prof. Grütter, that the changes be approved.

   The motion carried.
PHYS 580  Introduction to String Theory  
Course retirement  
3 credits

Associate Dean Western moved, seconded by Prof. Grütter, that the retirement be approved.

The motion carried.

2. Atmospheric & Oceanic Sciences

New Course to be Included in List of Freshman Courses

ATOC 100  Extr.-Weath. & Clim.-Chg Phys.  
3 credits

404.2  Associate Dean Western explained that the above course would introduce freshman students to the field of atmospheric and oceanic sciences.

Associate Dean Western moved, seconded by Prof. Brown, that the course be adopted.

The motion carried.

3. Mathematics & Statistics

Course renumberings:

MATH 454 [from -354]  Honours Analysis 3 (3 credits)
MATH 455 [from -355]  Honours Analysis 4 (3 credits)
MATH 456 [from -370]  Honours Algebra 3 (3 credits)
MATH 457 [from -371]  Honours Algebra 4 (3 credits)
MATH 458 [from -380]  Honours Differential Geometry (3 credits)
MATH 475 [from -375]  Honours Partial Differential Equations (3 credits)

404.3  Associate Dean Western said that the renumbering of the above courses was in line with the difficulty of the courses. Also, there would now be more higher-level courses for students in the Department of Mathematics & Statistics.

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

The motion carried.

Program Changes:
- B.Sc. Major in Mathematics

404.4  Associate Dean Western said that the change would now require students to take at least six credits of upper-level courses.

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

The motion carried.

4. Computer Science

B.Sc. Program Revisions:
- Major in Computer Science
- Honours in Computer Science
- Major in Software Engineering
- Honours in Software Engineering
- Liberal Program: Core Science Component in Software Engr. AC-14-18
- B.A. & Sc. Program Revision:
  - Major Concentration in Software Engineering AC-14-19

404.5 Associate Dean Western explained that the changes would add ECSE 539, Software Language Engineering, to the above programs, as a Complementary course.

Associate Dean Western moved, seconded by Prof. Hendren, that the above changes be approved.

The motion carried.

B.A. Program Revision - For Information:
- Major Concentration in Software Engineering

5. Minor Course Change Report (For information) AC-14-8

404.6 Associate Dean Western outlined the changes in the Minor Course Change Report.

6. Proposal to Modify M.D.,C.M. Prerequisites and MED-P Curriculum AC-14-21A

404.7 The MED-P changes have been approved. Associate Dean Western said that the Faculty of Science was in ongoing discussions with the Faculty of Medicine concerning the proposed changes to the M.D.,C.M.

II. MEETING OF NOVEMBER 25, 2014

Courses and Programs

1. Neuroscience
   Minor in Neuroscience AC-14-7

404.8 Associate Dean Western explained that the changes were to place more emphasis on the interdisciplinary nature of neuroscience.

Associate Dean Western moved, seconded by Prof. Damha, that the changes be approved.

The motion carried.

2. Anatomy & Cell Biology
   ANAT 214 Systemic Human Anatomy AC-14-24
   Changes: course activities, supplementary Calendar information
   3 credits

   Associate Dean Western moved, seconded by Prof. Brown, that the changes be approved.

   The motion carried.

3. McGill School of Environment
   B.Sc. Program Changes:
   - Major in Environment: Biodiversity and Conservation Domain AC-14-25

404.9 Associate Dean Western said that these were housekeeping changes.
Associate Dean Western moved, seconded by Prof. Green, that the changes be approved.

The motion carried.

B.Sc. (Ag. Env. Sc.) Program Changes – For Information:
- Major in Environment: Biodiversity and Conservation Domain

4. Chemistry

New Course:
CHEM 283 Intro Phys Chem Lab AC-14-26
2 credits

404.10 Associate Dean Western said the new course was the result of merging a Fall term course with a Winter term course. The new course would be offered in both terms.

Associate Dean Western moved, seconded by Prof. Damha, that the course be adopted.

The motion carried.

CHEM 345 Intro to Quantum Chem AC-14-27
Changes: title, prerequisites
3 credits
CHEM 355 Appl of Quantum Chemistry AC-14-28
Changes: title, description
3 credits

Associate Dean Western moved, seconded by Prof. Damha, that the above changes be approved.

The motion carried.

CHEM 482 Organic Chem:Natural Products AC-14-29
Changes: number [from -382], restrictions
3 credits

404.11 Associate Dean Western said that the number change reflects the level of complexity of the course, which has a 300-level prerequisite.

Associate Dean Western moved, seconded by Prof. Damha, that the changes be approved.

The motion carried.

Program Changes:
- Major in Chemistry AC-14-30
- Honours in Chemistry AC-14-31
- Major in Chemistry with Bio-organic Option AC-14-32
- Honours in Chemistry with Bio-organic Option AC-14-33
- Major in Chemistry with Materials Option AC-14-34
- Honours in Chemistry with Materials Option AC-14-35

404.12 Associate Dean Western said that the program changes were to take account of the above new course and course changes, as well as other factors.
Associate Dean Western moved, seconded by Prof. Damha, that the changes be approved.

The motion carried.

**New Programs:**
- Major in Chemistry with Measurement Option AC-14-36
- Honours in Chemistry with Measurement Option AC-14-37

404.13 Associate Dean Western said that the new programs had been requested by students, and would provide for students who wanted to study physical and analytical chemistry.

Associate Dean Western moved, seconded by Prof. Damha, that the above programs be adopted.

The motion carried.

5. **Pharmacology & Therapeutics**

**New Course:**
- PHAR 200 Introduction to Pharmacology 1 1 credit AC-14-38
- PHAR 201 Introduction to Pharmacology 2 1 credit AC-14-39

404.14 Associate Dean Western said the new courses would provide U1 students with an introduction to pharmacology.

Associate Dean Western moved, seconded by Prof. Grütter, that the courses be adopted.

The motion carried.

**New Course:**
- PHAR 390 Laboratory in Pharmacology 3 credits AC-14-40

404.15 Associate Dean Western said the new laboratory course would be a two-week intensive Complementary course for Honours students, to be given in the late summer.

Associate Dean Western moved, seconded by Prof. Roulet, that the course be adopted.

The motion carried.

**New Course:**
- PHAR 505 Structural Pharmacology 3 credits AC-14-41

404.16 Associate Dean Western said PHAR 505 and PHAR 565, as well as the changes to pre-existing pharmacology courses, would expand the course offerings available to pharmacology students.

Associate Dean Western moved, seconded by Prof. Mucci, that the course be adopted.
The motion carried.

**New Course:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHAR 565</td>
<td>Epigenetic Drugs and Targets</td>
<td>3</td>
</tr>
</tbody>
</table>

Associate Dean Western moved, seconded by Prof. Mucci, that the course be adopted.

The motion carried.

**Course Changes:**

- **PHAR 508**
  - Drug Discovery and Develop. 3
  - Changes: number [from -558]; course activities, title, Description, prerequisites, restrictions, supplementary Calendar Information
  - 3 credits

- **PHAR 562**
  - Neuropharmacology
  - Changes: title, description, prerequisites
  - 3 credits

- **PHAR 563**
  - Endocrine Pharmacology
  - (Changes: title, prerequisites, description, restrictions Supplementary Calendar info
  - 3 credits

Associate Dean Western moved, seconded by Prof. Mucci, that the above changes be approved.

The motion carried.

**Program Changes:**

- **Minor in Pharmacology**
- **Major in Pharmacology**
- **Honours in Pharmacology**

404.17 The program changes reflect the above new courses and course changes.

Associate Dean Western moved, seconded by Prof. Mucci, that the above changes be approved.

The motion carried.

6. **Earth & Planetary Sciences**

**New Course:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPSC 240</td>
<td>Geology in the Field</td>
<td>3</td>
</tr>
</tbody>
</table>

404.18 Associate Dean Western said that the new course, EPSC 240, was being added as an introduction and prerequisite to other field courses.

Associate Dean Western moved, seconded by Prof. Mucci, that the course be adopted.

The motion carried.

**Course Changes:**

- **EPSC 210**
  - Introductory Mineralogy

404.19

FacultyMinutes2December2014
EPSC 312  Change in description  
3 credits  
EPSC 312  Spectroscopy of Minerals  
Course Retirement  
3 credits  

**404.19**  
EPSC 312 was being retired to make space for EPSC 240. Some of the content of EPSC 312 was being moved to EPSC 210.

Associate Dean Western **moved**, seconded by Prof. Damha, that the above changes be approved.  

**The motion carried.**

EPSC 331  Field School 2  
Change in prerequisite  
3 credits  
EPSC 341  Field School 3  
Change in prerequisite  
3 credits  

Associate Dean Western **moved**, seconded by Prof. Mucci, that the above changes be approved.  

**The motion carried.**

EPSC 423  Igneous Petrology  
Change in prerequisite  
3 credits  
EPSC 445  Metamorphic Petrology  
Change in prerequisite  
3 credits  
EPSC 452  Mineral Deposits  
Change in prerequisite  
3 credits  
EPSC 530  Volcanology  
Change in prerequisite  
3 credits  

**404.20**  
The changes reflect the removal of EPSC 312 as a prerequisite. The courses will be restricted to U2 and U3 students.

Associate Dean Western **moved**, seconded by Prof. Mucci, that the above changes be approved.  

**The motion carried.**

**Program Changes:**

- Major in Geology (Renamed from Major in Earth & Planetary Sciences)  
  AC-14-58  
- Honours in Planetary Sciences  
  AC-14-59  
- Honours in Geology (Renamed from Honours in Earth Sciences)  
  AC-14-60  

**404.21**  
Associate Dean Western said two programs were being renamed to make clearer their content. The program changes also reflected the introduction of EPSC 240, and the retirement of EPSC 312, as well as other changes.
Associate Dean Western moved, seconded by Prof. Mucci, that the above changes be approved.

The motion carried.

7. **Minor Course Change Report (For information)** AC-14-23

404.22 Associate Dean Western described the changes in the Minor Course Change Report.

8. **APC Subcommittee on Courses and Teaching Programs (SCTP)** AC-14-61

404.23 Associate Dean Western said that SCTP had asked departments to review and consider retiring low enrolment programs. In future, when proposing new programs, departments should justify them in the Rationale of the New Program Forms. The Rationale should also include justification for not retiring any low-enrolment programs already offered by the department. SCTP has posted this requirement in its Guidelines for New Programs on its website.

(5) **DEAN’S BUSINESS**

- Fessenden Prizes

405.1 Associate Dean Kaspi said that the Fessenden Prizes recognize achievements in innovative research with commercialization potential.

405.2 For the 2014 competition, there were four applicants: 3 from graduate students and one from an undergraduate student.

(1) In the Graduate student category, the winner was:
James **Renaud (Medical Physics)**
Research Project Title: Graphite Probe Calorimeter: The first absolute dosimeter for clinical radiation therapy.

(2) For the Undergraduate student category, the winner was:
Bojing **Jia (Biology, B.Sc. student)**
Research Project Title: A New Versatile Platform for Mechanical Perturbation of Cells.

405.3 Dean Grant said that in future there will be more extensive publicity about the Fessenden Prizes. There is actually a significant amount of money available for these prizes, and their existence deserves to be more widely known. He encouraged students to apply for these prizes in the future.

(6) **REPORT ON ACTIONS OF SENATE**

Please note that the entire Minutes of Senate are available on the Web at http://www.mcgill.ca/senate/senate-2014-2015/senate-meeting-documents

**Senate Meeting of October 22, 2014 – Senator Timothy Moore**

The meeting started 10 minutes late, owing the slow arrival of the Principal, but finished 30 minutes ahead of schedule, to the relief of all.

Under ‘kudos’ the Principal mentioned the Nobel Prize awarded to John O’Keefe, a McGill alumnus in physiological psychology, which I suppose is almost FACSCI, and
commented upon rankings, where she was told in London by the managers of the QS system (in which McGill ranks 25th and which we use) not to take rankings too seriously. Yes, we all know that.

Dean Grant presented, in his best Shakespearean actor mode, a Memorial Tribute to Professor Emeritus Joachim (Jim) Lambek of the Department of Mathematics & Statistics, who held the honour of the first McGill PhD in Maths.

Three questions were presented by Senators. The first, from Senator Moore questioned the manner in which the University had dealt with a football player. In particular: was there a regulation prohibiting students with a criminal record participating in varsity sports?; should the University deal with academic and not judicial matters?; what are the vague ‘values and principles of our community’?; and should staff and professors that have criminal record be allowed to represent McGill? Unfortunately the present protocol of providing a written answer beforehand was not followed – either the answer was not passed on from the Secretariat to Senate or the respondents did not want a written answer circulated beforehand. Long, boring oral answers were given by the Deputy Provost and the Provost, which boiled down to: no, there are no regulations prohibiting students with a criminal record participating in varsity sports; yes we should stick to academic matters and presume innocence until found guilty; the values and principles of our community are described in a bewildering array of documents; and yes you can be a professor with a criminal record, unless you have been convicted of financial fraud, in which case you cannot be involved in financial matters, such as holding a grant.

The other two questions, also answered by the Deputy Provost, dealt with student matters.

Dean Kreiswirth presented the new Regulations and Guidelines on Graduate Student Advising and Supervision which has gone through many discussions over the past two or three years and appears driven by a few cases of supervisory problems in a few units. There was, at times, a heated discussion, with a rather frustrated, defensive Dean. In response to a question from a student, the Dean reported that new faculty would be required to attend a supervisory orientation, those who had not supervised for 5 years would have to discuss attendance with their Chair, and the rest of us, thank heavens, would not have to attend, to which there was an almost audible sigh of relief.

A modification to Senate composition was presented. From the FACSCI perspective, our professor representation would remain at 9 (so we shall have to prepare these silly reports at the same frequency) and there would be an overall increase from 107 to 113 in membership of Senate. There was some semi-heated discussion, particularly about the absence of specific MUNASA representation.

Mr. Robert Couvrette presented the Annual Report from the Senate Committee on Physical Development, noting that renovations to the façade of the Wong Building will cost $8 million and that the architect and builder are being sued. No one asked about the Schulich Library Building, perhaps fearing the worst.

Senators left at 4:30, watching for falling bricks.

The Senate meetings of November 4, 2014 (Joint Senate-Board Meeting) and of November 19, 2014 will be reported at a future Faculty of Science meeting.
(7)  **MEMBERS’ QUESTION PERIOD**

407.1 In response to Prof. Moore, Dean Grant informed Faculty that he will be going to the Bellairs Institute in Barbados for one week, and will be reporting back at a future Faculty meeting on the Annual Members meeting and the audit.

(8)  **OTHER BUSINESS**

There being no further business, the meeting adjourned at 3:32 p.m.