

**FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, October 15, 2013
Leacock Council Room – L232**

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-12-33, S-13-1 to S-13-11

Dean Grant called the meeting to order at 3:05 p.m. He welcomed new and continuing members to the first Faculty of Science meeting of the year.

A. McGill Centraide Campaign

Dean of Management, Peter Todd (co-chair of McGill Centraide), and Ms. Tracey Nguyen, Development Officer from the Faculty of Management, gave a presentation on the McGill Centraide Campaign. Dean Todd said Centraide raises donations to support a vast network of community agencies that help individuals and families in situations of poverty. He said 25% of people live below the poverty line in Montreal. Over the years, McGill has been one of the top contributors to Centraide, and is the top university contributor. The goal of the 2013 Montreal Centraide Campaign was to raise \$58.5 million, and the McGill goal was to raise \$400,000. Members of the McGill community could contribute directly to the McGill campaign or by way of payroll deductions. Dean Todd encouraged members to become actively involved with the campaign.

Dean Grant thanked Dean Todd and Ms. Nguyen for their time, and he emphasized Centraide's good work.

B. New Professors, Recently Tenured Professors, and Recently Promoted Full Professors:

Dean Grant congratulated the new professors, the recently tenured professors, and the recently promoted full professors. He said that, as was traditional, new professors had been invited to the first Faculty meeting to be introduced to their colleagues.

New Professors

Chairs or Chairs' delegates introduced the new professors present at the meeting, and described their academic background. The professors then briefly described their areas of research.

Atmospheric & Oceanic Sciences	Assistant	MERLIS, Timothy
Atmospheric & Oceanic Sciences	Assistant	ZUEND, Andreas
Biology	Assistant	HENDRICKS, Michael
Biology	Assistant	REYES-LAMOTHE, Rodrigo
Earth & Planetary Sciences	Assistant	HARRINGTON, Rebecca
Geography	Assistant	MOSER, Sarah
Geography	Assistant	ROBINSON, Brian
Geography/MSE	Assistant	MANAUGH, Kevin
Mathematics & Statistics	Associate	KASSAEI, Payman
Physics	Assistant	CHILDRESS, Lilian
Psychology	Assistant	GU, Fei
Redpath	Assistant	BARRETT, Rowan

Tenured Professors

The newly tenured professors present gave a brief description of their research areas.

Biology	Associate	ZHENG, Hugo
Chemistry / Physics	Associate	SIWICK, Bradley
Earth & Planetary Sciences	Associate	HALVERSON, Galen
Mathematics & Statistics	Associate	ADDARIO-BERRY, Louigi
Psychology	Associate	CHUDASAMA, Yogita

Full Professors

Full Professors present also described their research expertise.

Biology	Professor	GONZALEZ, Andrew
Chemistry / Physics	Professor	WISEMAN, Paul
Physics	Professor	MOORE, Guy

Dean Grant presented a gift bag to the professors present.

(1) ADOPTION OF AGENDA

Prof. Grütter **moved**, seconded by Prof. Kry, that the Agenda be adopted.

The motion carried.

(2) SEATING OF STUDENT MEMBERS

S-13-1

Dean Grant called out the names of the student members, and asked them to introduce themselves.

(3) CANDIDATES FOR DEGREES

a) Bachelor of Arts and Science

S-13-2

203.1 Director (Advising Services) Allard said there were 8 students graduating with the B.A. & Sc. degree, as opposed to 14 students in October 2012.

b) Bachelor of Science

S-13-3

203.2 Director Allard said there were 91 students graduating with the B.Sc. degree, and said that there had been 88 candidates the previous year.

Director Allard **moved**, seconded by Mr. Barry, that the candidates be recommended to the Senate Steering Committee for the B.A. & Sc. and B.Sc. degrees.

The motion carried.

c) Diploma in Environment

S-13-4

There were no students for the above Diploma.

d) Diploma in Meteorology

S-13-5

There were no students for the above Diploma.

Director Allard further **moved**, seconded by Prof. Hurtubise, that the Dean be given discretionary power to make such changes in the degree list as would be necessary to prevent injustice.

The motion carried.

203.3 Director Allard thanked the academic advisors, the program directors, and all who were involved with the graduation lists.

(4) MINUTES OF MAY 21, 2013

Prof. Mucci **moved**, seconded by Prof. Gyakum, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(6) REPORTS OF COMMITTEES

a) 1) Nominating Committee (For Information) S-13-6

The Nominating Committee consists of the Science Senate Representatives; the Convenor currently was Prof. Peter Grütter.

2) Science Chairs' Council (For Information)

The Science Chairs' Council serves as an advisory committee to the Dean, and consists of the Dean, the Associate Dean (Academic), the Associate Dean (Research and Graduate Education), the Director of Advising Services, and the heads of all units in the Faculty of Science, including the MSE and the Redpath Museum.

3) Tenure Committee (For Information)

4) Committee On Student Standing (For Approval)

The Committee on Student Standing reviews student appeals of decisions made by the Director of Advising Services.

Prof. Mucci **moved**, seconded by Prof. Jensen, that the membership of the Committee on Student Standing be approved.

The motion carried.

5) Academic Committee (For Approval)

The Academic Committee reviews and approves all academic content taught in the Faculty of Science.

Associate Dean Hendren **moved**, seconded by Prof. Grütter, that the membership of the Academic Committee be approved.

The motion carried.

6) Scholarships Committee (For Approval)

The Associate Dean of Research and Graduate Education serves as the Chair of the Science Scholarships Committee.

Prof. Mucci **moved**, seconded by Prof. Kry, that the membership of the Scholarships Committee be approved.

The motion carried.

7) Leo Yaffe & Principal's Prizes Committee (For Approval)

The Leo Yaffe and Principal's Prizes Committee recommends candidates for these awards for excellence in teaching.

Ms. Loo **moved**, seconded by Ms. Curry, that the membership of the Leo Yaffe & Principal's Prizes Committee be approved.

The motion carried.

8) Council of Graduate and Postdoctoral Studies (For Approval)

Representatives of all faculties sit on the Council of Graduate and Postdoctoral Studies (CGPS).

Prof. Mucci **moved**, seconded by Prof. Gyakum, that the Science members be approved for the membership of the CGPS.

The motion carried.

(9) B.A. & Sc. PROGRAM ADMINISTRATION COMMITTEE (PAC)

The B.A. & Sc. PAC reviews changes and coordinates the administration of the B.A. & Sc. degree programs. Only the Science membership was for approval by the Faculty of Science.

Prof. Grütter **moved**, seconded by Prof. Damha, that the Science membership of the B.A. & Sc. PAC be approved.

The motion carried.

b) Scholarships Committee

S-13-7

Prof. Peter Grütter, former Chair of the Science Scholarships Committee, said that the In-course Scholarships Report (Document S-13-7) lists awards given to continuing students based on their grades for the 2012-2013 academic year. The SGPA cut-off for receiving a monetary award was 3.99, and for the Dean's Honour List designation, 3.94. He said that there were 144 students with a 4.00 SGPA and two students with a 3.99. Prof. Grütter mentioned that students were outstanding, but that the funding was extremely tight.

c) Academic Committee

S-13-8

The Academic Committee approved the following on Tuesday, September 24, 2013:

SECTION A: COURSE CHANGES

- Earth & Planetary Sciences

EPSC 320	Elementary Earth Physics Prerequisites 3 credits	AC-13-3
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206.1 After explaining that the revisions were mainly housekeeping changes and that the prerequisites better reflected the necessary background, Associate Dean Hendren **moved**, seconded by Prof. Mucci, that the course changes be approved.

The motion carried.

EPSC 350	Tectonics Prerequisite 3 credits	AC-13-4
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206.2 The change was to streamline prerequisites, since MATH 222 was already a prerequisite course for EPSC 320, another prerequisite course for EPSC 350.

Associate Dean Hendren **moved**, seconded by Prof. Williams-Jones, that the course changes be approved.

The motion carried.

EPSC 482 D1/D2	Res in Earth & Planetary Sci Title, description, supplementary Calendar information 3 credits	AC-13-5
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206.3 Associate Dean Hendren said that the main change to EPSC 482, currently offered as a research and/or reading course, was that it would now be offered only as a research project course. A separate reading course may be created in the future, if necessary.

206.4 Associate Dean Hendren added that instructions (under Supplementary Calendar Information) concerning procedures for students to follow, were a good idea for all research project courses, and encouraged units to provide such instructions.

Associate Dean Hendren **moved**, seconded by Prof. Williams-Jones, that the course changes be approved.

The motion carried.

EPSC 561	Ore-forming Processes Title 3 credits	AC-13-6
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EPSC 562	Ore-forming Processes 2 Course retirement 3 credits	AC-13-7
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206.5 The title change for EPSC 561 was due to the retirement of EPSC 562 (Ore-forming Processes **2**).

Associate Dean Hendren **moved**, seconded by Prof. Jensen, that the title of EPSC 561 be changed and that EPSC 562 be retired.

The motion carried.

- 206.6** Associate Dean Hendren reminded members that departments should review their course offerings on an annual basis, in case some courses are no longer being offered or are no longer relevant, etc. The administration is likely to continue requesting us to retire zero enrolment courses and to justify low enrolment courses.

SECTION B: PROGRAM CHANGES

1) Minor in Education For Science Students

AC-13-2

- 206.7** Associate Dean Hendren explained that the revisions to the Minor in Education for Science Students were due to the replacement of a Complementary course as a result of a prerequisite change.

Associate Dean Hendren **moved**, seconded by Ms. Loo, that the program changes be approved.

The motion carried

2) Earth & Planetary Sciences

- M.Sc.; Earth and Planetary Sciences **AC-13-8**
- M.Sc.; Earth and Planetary Sciences – Environment Option **AC-13-9**

- 206.8** Associate Dean Hendren said the required course, EPSC 666, Current Issues in Geosciences, was being removed since the Department felt that students would be better served by attending departmental seminars by outside speakers. Complementary courses were being raised by three credits to compensate.

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

The motion carried

- Ph.D.; Earth and Planetary Sciences **AC-13-10**
- Ph.D.; Earth and Planetary Sciences – Environment Option **AC-13-11**

- 206.9** Associate Dean Hendren said that there were two main changes. One change was that the requirements for Ph.D. 1 and Ph.D. 2 were clearly specified in the program, and the second change was the removal of EPSC 666 from the above programs.

Associate Dean Hendren **moved**, seconded by Prof. Williams-Jones, that the above program changes be approved.

The motion carried

- 206.10** Associate Dean Hendren pointed out that (1) it was important to review low-enrolment options because McGill was reviewing low-enrolment programs, since maintaining them generated a lot of administrative work as well as paper, and (2) it was very important that the rules of the graduate programs be clear, and that they match their Calendar

description (the official description) precisely. She encouraged members to review their graduate programs.

SECTION C: Other (For Information Only)

- Courses on Dean's Multidisciplinary Undergraduate Research List (DMURL) **AC-13-1**

206.11 Associate Dean Hendren said that the DMURL list had been prepared by Mr. Victor Chisholm, Undergraduate Research Officer in the Faculty of Science. She said that each year members were asked to review the list of courses eligible for the DMURL, to check whether any courses should be added or deleted. Associate Dean Hendren mentioned that one of the courses, EPSC 482, had been changed from a research and/or reading course to a research course only. The change would make it very clear to students that the course was indeed a research course. Another course, GEOG 490, on the DMURL was running both as a research and/or reading course. She hoped that GEOG 490 would be clearly identified as a research course in the near future.

- **Teaching Evaluations**

206.12 Dean Grant said that the current default for teaching evaluations was that they not be made public unless instructors gave explicit permission. At its May 21, 2013 meeting, the Faculty had approved that the default should be for evaluations to be public, with instructors having to explicitly specify that they not be made public.

206.13 Associate Dean Hendren said she was currently on a university teaching evaluation committee to look into the best way to present the results of course evaluations to students, to chairs, and to faculty, such that results would be meaningful and easily readable. She asked members to contact her to provide feedback.

d) Committee on Student Standing (CSS) **S-13-9**

206.14 Director Allard said that one request (to transfer to the PEMC program group) had been submitted to the CSS. The request was approved.

(7) DEAN'S BUSINESS

a) Dean's Multidisciplinary Undergraduate Research List **S-13-10**

Director Allard said that in order for students to be listed on the DMURL, they must complete at least 9 credits of graded research-based courses in a minimum of two departments; at least 3 credits must be outside a student's main department. She said that there were two students graduating in October 2013 who would appear on the DMURL.

b) Enrolment **S-13-11**

207.1 Associate Dean Hendren said that this would be the final year she would be making a presentation on enrolment, since it was her final year as Associate Dean (Academic).

207.2 Associate Dean Hendren said that in summary, the Faculty of Science had received almost exactly the desired number of students.

207.3 Associate Dean Hendren briefly described the admissions process. Students applying to McGill were sorted into groups: students from CEGEPs, Ontario high schools, rest-of-

Canada high schools, U.S. high schools and overseas high schools. Each group was assigned an admission threshold, based on grades, which, on previous years' experience, should generate about the required number of offers. Offers were made on a rolling basis, students having higher grades receiving earlier offers. There were different deadlines for different groups.

- 207.4** The 2013-2014 academic year was the fifth year making use of admission pools. The concurrent B.Sc./B.Ed. program had been retired as of 2012, so high school students applied to one of two pools:
- 207.5** (i) Biological, Biomedical and Life Sciences (BBL) pool — students planning to major in the Departments of Anatomy & Cell Biology, Biochemistry, Biology, Microbiology & Immunology, Physiology or Psychology.
- 207.6** (ii) Physical, Earth, Math and Computer Science (PEMC) pool — students planning to major in the remainder of the units in Science.
- 207.7** At the end of U0, students can choose to take a program from within their pool, change pools by applying for an intrafaculty transfer, or apply to the restricted enrolment Microbiology & Immunology or Neuroscience. Beginning in Fall 2014, Microbiology & Immunology will be merged into the BBL pool.
- 207.8** Incoming CEGEP students are able to choose from either of the two pools, or apply to the Microbiology & Immunology or Neuroscience programs. Students can change majors within their pool, or change pools via an intrafaculty transfer. Again, in Fall 2014, Microbiology & Immunology will be merged into the BBL pool.
- 207.9** Associate Dean Hendren briefly outlined the admissions grade cut-offs for various groups for the two pools. As well as overall grades, the mathematics/science grades were examined, with students requiring high grades in these. The admissions cut-offs remained high.
- 207.10** The cut-offs for admission to the B. Engineering program (whose Ontario and Canadian high school cohorts take the Science Freshman Program) has been slowly increasing.
- 207.11** The percentage of U0 students in the PEMC pool was generally moving in the right direction, increasing from 19% in 2009. However, it had fallen from 31% in 2012 to 29% in 2013, although the number had actually increased in 2013. While a good target would be 40%, the immediate aim should be to top 30% in 2014.
- 207.12** Associate Dean Hendren said she would like people to think about ways to increase PEMC registrations, and that it should be emphasized to students that admission to medical school could still be obtained by way of a PEMC major.
- 207.13** Actual admissions to the B.Sc. and the B.A. & Sc. were slightly over the targets, which was desirable, since the aim is to avoid going under the target. The number of US and OS high school students had increased, although unfortunately this had been achieved by lowering the cut-offs. Associate Dean Hendren pointed out that the B.A. & Sc. was not as popular with CEGEP students as with students from other groups.
- 207.14** Regarding yields (the percentage of offers that are accepted), the four High School Groups were trending together except for a lower yield this year for Ontario High Schools. While there had been a decrease in CEGEP yield over the previous several years, the yield had increased in 2013. It would be desirable to increase it further.

- 207.15** For 2013, there had been several special challenges: some bad press for Montréal and the consulate strike. As well, international fees had increased by \$3,000 over the previous year (to \$33,145 per year). A number of supposedly "international" students wind up paying Canadian or Québec fees. Pressure to admit more international students can lead to lowered admission standards.
- 207.16** There was a very slight decrease in the total number of B.Sc. and B.A. & Sc. students over the previous year, but an increase of 21.8% since 2004. The U0 load for Science had increased by 39.8% since 2004, partly due to an increased number of Engineering students. With the coming end of the CEGEP bubble, the pressure on U0 courses would increase further.
- 207.17** Associate Dean Hendren said that SOUSA had done a good job in facilitating transfers into the B.Sc. The B.A. & Sc. had experienced a net loss of about 5%, which, while still too high, was down from 20% four years previously. Students were clearly choosing more wisely initially.
- 207.18** January admissions were only for CEGEP students and McGill graduates doing a second degree, and only for the PEMC group. Students should apply only if they are genuinely interested in a PEMC program, since there is no guarantee that they would be able to transfer to another program in the Fall. However, there were still many health science options within the PEMC group by way of minors and a wise choice of majors.
- 207.19** **Points to Consider (High Schools):**
- I. The historical yield for the High School pool was not very reliable at predicting future yields; more flexibility involving admissions would be useful.
 - II. Also useful would be better prediction of the fraction of applicants over a given threshold.
 - III. It must be ensured that international students are of the same calibre as Canadian students, since there is increasing pressure to raise international enrolment further.
 - IV. More effort should be put towards interesting high school applicants in the PEMC pool.
- 207.20** **Points to Consider (CEGEPs):**
- I. With the eventual winding down of the "baby-boom echo," more effort needs to be expended to recruit CEGEP students into Science and into McGill. Efforts should also be directed at francophone CEGEPs.
 - II. There will be further pressure on the U0 courses in the future, including a future trend to increase the proportion of first-year U0 students.
- 207.21** In response to a member who pointed out the strain that the 22% increase in enrolment since 2004 was putting on resources, Dean Grant said the Faculty was trying to direct students into the PEMC group. He also said that with the pressure on the U0 courses, the Faculty would need more resources from the university to teach U0 students from other faculties.
- 207.22** In reply to a member, Associate Dean Hendren said that Exchange, Visiting and Special students did not appear on any enrolment statistics, and that the Faculty did not receive credit for them. She said this was of concern to her.

207.23 In response to another member, Associate Dean Hendren said that for various reasons less than half of the students who were accepted from outside Canada, and thus should be international students, actually paid international fees.

207.24 On behalf of the Faculty, Dean Grant thanked Associate Dean Hendren for her excellent enrolment presentations over the years.

(8) 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-2013-2014/senate-meeting-documents-2013-2014/>

208.1 Prof. Graham Bell will report on the Senate Meeting of September 18, 2013 at the next Faculty of Science meeting.

(9) MEMBERS' QUESTION PERIOD

There were no members' questions.

(10) OTHER BUSINESS

There being no further business, the meeting adjourned at 4:10 p.m.