

**FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, December 5, 2006
Leacock Council Room - L232**

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-06-17 to S-06-21

Dean Grant called the meeting to order at 3:04 p.m.

Pre-Agenda Presentations:

At the start of the Faculty of Science meeting, short research presentations were given by:

- Professor Bruno Tremblay, Department of Atmospheric & Oceanic Sciences
- Professor Navin Ramankutty, Department of Geography
- Professor Patrick Hayden, School of Computer Sciences

Dean Grant said that about half of the Faculty's professors had been hired in the last six or seven years, and that the presentations were a proof of the high quality of the newly hired professors.

(1) ADOPTION OF AGENDA

Prof. Gale **moved**, seconded by Prof. Mucci, that the Agenda be adopted.

The motion carried.

(2) DEPUTY PROVOST (STUDENT LIFE AND LEARNING) MORTON J. MENDELSON

402.1 Deputy Provost Mendelson handed out an aspirational statement from the Principal's Task Force on Student Life and Learning, entitled "A Student-Centered University."

402.2 In addition to the aspirational statement, the Task Force had issued a number of recommendations: the creation of a student-centred university and the creation of a senior administrative position related to this, the institution of professional academic advising and mentoring, the provision of resources for students, and the building of a learning community.

402.3 Deputy Provost Mendelson described the recommendations in some detail.

402.4 Deputy Provost Mendelson emphasized that any consideration of student life and learning at McGill must take into account the fact that McGill was a research-intensive university, not, say, a liberal-arts college. In order to create a student-centred university, there must be agreement on what actually constituted a student-centred university. It had been recommended that, as a student-centred university:

- McGill would provide the best education possible to students
- McGill would provide a vibrant environment for learning and academic progress, campus life and personal development

- McGill would treat students as valued members of the community, and would provide students with the means and opportunities to pursue their education and other goals.
- McGill would make students' best interests a focus of the academic, administrative, and support staff, and would make decisions with due consideration for their impact on students.
- Students would participate in McGill's governance and in ongoing dialogue, and would influence McGill's goals.
- McGill would foster students' interest in organizing their own activities.

402.5 As had been recommended, the post of Deputy Provost (Student Life and Learning) had been created to ensure that student life and learning would be considered in making administrative decisions, and to promote and enhance student life and learning at McGill. Morton J. Mendelson had been appointed as the first Deputy Provost (Student Life and Learning).

402.6 A number of areas were slated to report to the Deputy Provost (Student Life and Learning), including:

- Admissions, Recruitment & Registrar
- Athletics
- Office of the Dean of Students
- Residences
- Services for Students
- Teaching & Learning Services
- University academic quality control

402.7 Deputy Provost Mendelson said that a very common complaint of students was that the advising process was broken. Consequently, the Task Force had recommended that advising and mentoring be made a priority, with high-quality professional academic advising being made available for all students and being geared to the appropriate stage of students' academic careers. Members of the academic staff would fill mentoring roles. This process would require conscientious action on the part of both McGill and the students themselves.

402.8 Deputy Provost Mendelson mentioned that the Faculty of Science was held up within McGill as the hallmark of good advising.

402.9 Regarding the provision of resources for graduate students, it had been recommended that McGill provide competitive base funding for research students, and adequate, safe work spaces on campus; for undergraduate students, the recommendations were that sufficient financial assistance be provided so that students offered admission could actually attend, and that informal meeting spaces for students be made available across McGill's campuses.

402.10 The Faculty of Science already did provide good funding for its graduate students, and Freshman Interest Groups (FIGs) were an initiative of the Faculty of Science aimed at undergraduate students.

402.11 Regarding the recommendation concerning building a learning community, McGill would build a community which would provide students with a window on the world. This would be aided by McGill's diverse student body and the fact that McGill was a primarily English-language university in a multicultural city within a French-speaking province. Furthermore, McGill would foster an inclusive and welcoming community by way of supporting strong collegial bonds, fostering mutual respect and accountability, reducing bureaucracy, and celebrating diversity.

- 402.12** The administrative response to the recommendations of the Principal's Task Force on Student Life and Learning would come in two phases: an outline in February 2007, followed by a detailed analysis in September 2007. The administrative response would be handled by the Provost's Office, with broad consultation. Deputy Provost Mendelson said that it would be impossible to implement all recommendations immediately, but that the recommendations would be implemented systematically.
- 402.13** Would new resources be required for implementation of the recommendations of the Task Force? Perhaps, and some of these had already been obtained. A good potential source was donations, and these were being actively pursued.
- 402.14** In conclusion, Deputy Provost Mendelson said that it was unfortunate that there were insufficient hard copies of the document, "A Student-Centered University," at the current meeting. He asked that copies of this document be circulated by e-mail to Faculty members, and he urged members to read and think about the document.
- 402.15** Deputy Provost Mendelson answered members' questions.
- 402.16** Dean Grant thanked Deputy Provost Mendelson for the very informative presentation.

(3) MINUTES OF NOVEMBER 7, 2006 S-06-17

Prof. Barrette **moved**, seconded by Prof. Baker, that the Minutes be approved.

The motion carried.

(4) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(5) REPORTS OF COMMITTEES

a) Committee on Student Standing S-06-18

Associate Dean Leighton said that due to lack of business, there was no report from the Committee on Student Standing.

b) Scholarships Committee – New Awards S-06-19 (Revised)

i) Michael Wing Kin Chan & Lina Lai Yan Chan Scholarships in Science

Associate Dean Leighton **moved**, seconded by Prof. Mucci, that the scholarship be approved.

The motion carried.

ii) George and Lidia Petras Scholarships in Science

Associate Dean Leighton **moved**, seconded by Prof. GowriSankaran, that the scholarship be approved.

The motion carried.

**c) Disciplinary Report (for Information)
S-06-20**

Associate Dean Leighton pointed out the Disciplinary Report to members.

d) **Academic Committee** **S-06-21**

Associate Dean Hendren thanked Josie D'Amico and Christopher Johns for their work in putting together the large number of documents for the meeting. She also thanked units for their efforts in creating the Core Science Components for the B.Sc. Liberal program.

The Academic Committee approved the following on Tuesday, November 21, 2006:

SECTION A: NEW PROGRAMS

405.1 Associate Dean Hendren reminded members that the proposed B.Sc. Liberal Program had two components: a Core Science Component (CSC) for depth and a Breadth Component to provide breadth. She said that all units had submitted CSCs and these were being considered for approval at the current meeting.

(1) B.Sc. Liberal - Core Science Component Programs in:

- Anatomy & Cell Biology **AC-06-25P**

Associate Dean Hendren **moved**, seconded by Prof. Chmura, that the program be adopted.

The motion carried.

- Atmospheric & Oceanic Sciences **AC-06-25A**

Associate Dean Hendren **moved**, seconded by Prof. Yau, that the program be adopted.

The motion carried.

- Biochemistry **AC-06-25B**

Associate Dean Hendren **moved**, seconded by Prof. Kilfoil, that the program be adopted.

The motion carried.

- Biology **AC-06-25C**

Associate Dean Hendren **moved**, seconded by Prof. Chase, that the program be adopted.

The motion carried.

25D - Chemistry; Biological Option **AC-06-**

- Chemistry; Physical Option** **AC-06-25E**
- Chemistry; General Option** **AC-06-25F**

Associate Dean Hendren **moved**, seconded by Prof. Wiseman, that the above programs be adopted.

The motion carried.

- Computer Science**AC-06-25G****405.2**

Associate Dean Hendren informed members of some minor changes that had been made to the CSC in Computer Science since its approval by the Academic Committee.

Associate Dean Hendren **moved**, seconded by Prof. Vangheluwe, that the program be adopted.

The motion carried.

- Earth & Planetary Sciences**AC-06-25H**

Associate Dean Hendren **moved**, seconded by Prof. Baker, that the program be adopted.

The motion carried.

- Geography**AC-06-25I**

Associate Dean Hendren **moved**, seconded by Prof. Chmura, that the program be adopted.

The motion carried.

- Mathematics**AC-06-25J****- Statistics****AC-06-25K**

Associate Dean Hendren **moved**, seconded by Prof. Drury, that the above programs be adopted.

The motion carried.

- Microbiology & Immunology**AC-06-25L**

Associate Dean Hendren **moved**, seconded by Mr. Ng, that the program be adopted.

The motion carried.

- Physics**AC-06-25M**

Associate Dean Hendren **moved**, seconded by Prof. Gale, that the program be adopted.

The motion carried.

- Physiology**AC-06-25N**

Associate Dean Hendren **moved**, seconded by Prof. Gehring, that the program be adopted.

The motion carried.

- Psychology**AC-06-25O**

Associate Dean Hendren **moved**, seconded by Prof. Moskowitz, that the program be adopted.

The motion carried.

(2) B.Sc. Freshman Program

AC-06-21 (REV 3)

- 405.3** In a presentation, Associate Dean Hendren gave an overview of the current Science Freshman Program, including a brief summary of its courses. She then described the history of the current Freshman Program.
- 405.4** Associate Dean Hendren outlined the objectives of the proposed Freshman Program, which were to provide a good preparation for the student's intended field of study, whether specialized or interdisciplinary; to provide a breadth of scientific knowledge, taking into account all the scientific strengths in the Faculty; and to allow for an elective course in the Freshman year.
- 405.5** Associate Dean Hendren described the proposed Freshman Program [Document # AC-06-21 (Rev 3)], and then she herself posed and answered a series of questions about the program.
- 405.6** During a lengthy discussion of the Freshman Program, a number of points were brought up, including:
- The issue of principle as to what the Freshman Program represented or should represent.
 - That there was an overall philosophy behind McGill's Science programs, namely that students should acquire a basic foundation in Science by taking mathematics, chemistry, physics and biology. All other fields of science flowed from these.
 - That nowadays a basic foundation in Science could involve more than the four areas of mathematics, chemistry, physics and biology.
 - The question of whether disciplines such as computer science, earth system science and psychology should or should not be considered as basic sciences.
 - That science had advanced over the last 35 years, when fields such as atmospheric science were not high in people's consciousness. Science was now broader than the traditional areas.
 - That Freshman students, with their necessarily limited experience, would not understand the advantage of receiving McGill's traditional broad grounding in science.
 - Why the philosophy of McGill's Faculty of Science was so different from the philosophy of Faculties of Science in almost all universities in North America and Europe.
 - That, rather than providing flexibility, the proposed Freshman Program would actually limit options.
 - The relative ease of changing majors at the end of the U0 year under the current Freshman Program compared to the proposed Freshman Program.
 - The tradeoff between flexibility at the beginning of the U0 year, and flexibility at the end of the U0 year.
 - That advisors in the Student Affairs Office did not anticipate advising problems with the proposed program; advising would actually be made easier because it would be specified which courses students should take for a particular discipline.
 - That the proposed Freshman Program presented a number of practical issues that could cause complications for both students and faculty, two of which were the possible effects on incoming students from CEGEPs doing their U1 year alongside more-advanced students who had taken the proposed Freshman Program, given that

the CEGEP curriculum was not likely to be modified in the near future; and the increased potential for students making decisions they would later regret.

- That at the university level, students were required to make choices.
- Whether Biology students would be able to avoid Chemistry or Physics courses.
- That units had been asked for a list of courses they considered essential to their own programs; the lists had been factored into each unit's proposed Freshman Program. In any event, if a unit considered a particular course(s) to be essential for a program, the unit could simply make that course(s) a prerequisite to a Required Course(s).
- The possibility of having only one introductory course in each scientific area.
- The question of why the Freshman Program should be such an emotional issue.

405.7 Dean Grant reminded members that retired professors and administrators were not eligible to vote at Faculty of Science meetings.

Associate Dean Hendren **moved**, seconded by Prof. Merrett, that the Freshman Program as described in Section 3.1 of Document # AC-06-21 (Rev 3) be adopted.

405.8 A vote was held.

In favor: 50
Against: 48

The motion carried.

405.9 Dean Grant thanked members for their participation in the discussion of the issue of the Freshman Program.

- (3) **Atmospheric & Oceanic Sciences**
- | | |
|--|-----------------|
| - Major in Atmospheric Science; Atmospheric Chemistry Option | AC-06-32 |
| - Honours in Atmospheric Science; Atmospheric Chemistry Option | AC-06-33 |

Associate Dean Hendren **moved**, seconded by Prof. Chmura, that the above programs be adopted.

The motion carried.

SECTION B: MAJOR PROGRAM CHANGES

Chemistry

- | | |
|---|-----------------|
| - Major in Chemistry; Atmosphere & Environment Option | AC-06-35 |
| - Honours in Chemistry; Atmosphere & Environment Option | AC-06-36 |

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

The motion carried.

SECTION C: NEW COURSES

- (1) **Mathematics & Statistics**
- | | | |
|----------|------------------------------|-----------------|
| MATH 533 | Honours Regression and ANOVA | AC-06-26 |
| | 4 credits | |

Associate Dean Hendren **moved**, seconded by Prof. Drury, that the course be adopted.

The motion carried.

- (2) **Psychology**
- | | | |
|----------|---|-----------------|
| PSYC 502 | Psychoneuroendocrinology
3 credits | AC-06-37 |
| PSYC 512 | Advanced Personality Seminar
3 credits | AC-06-38 |

Associate Dean Hendren **moved**, seconded by Prof. Baker, that the above courses be adopted.

The motion carried.

- (3) **Computer Science**
- | | | |
|----------|--|-----------------|
| COMP 280 | Hist and Phil of Computing
3 credits | AC-06-42 |
| COMP 321 | Programming Challenges
1 credit | AC-06-43 |
| COMP 322 | Introduction to C++
1 credit | AC-06-44 |
| COMP 364 | Comp. Tools for Life Sciences
3 credits | AC-06-45 |

Associate Dean Hendren **moved**, seconded by Prof. Vangheluwe, that the above courses be adopted.

The motion carried.**SECTION D: MAJOR COURSE CHANGES**

None

SECTION E: MINOR COURSE CHANGES (For Information Only)

- Report on Minor Course Changes **AC-06-24**

SECTION F: MINOR PROGRAM CHANGES (For Information Only)

- Report on Minor Program Changes **AC-06-P1**

SECTION G: OTHER (For Information Only)

- Mid-Term Examinations **AC-06-22**

(6) DEAN'S BUSINESS

Due to time constraints, the Committee of the Whole discussion concerning **How Should Space be Allocated?** was postponed to a future meeting.

(7) REPORT ON ACTIONS OF SENATE

Please note that the entire Minutes of Senate are available on the Web at <http://www.mcgill.ca/senate/minutes/>.

Due to time constraints, the following report was not actually read at the meeting.

- Senate Meeting of November 15, 2006 – Prof. D. Harpp

Minutes Senate's meeting held on Wednesday, November 15, 2006, at 2:30 p.m. in Room 232 of the Leacock Building

1) REPORT OF THE STEERING COMMITTEE

The report of the Steering Committee was received including reports on the Degrees of the 2007 Spring Convocation.

2) CHAIR'S REMARKS

The Principal opened her remarks by congratulating the Deans of Science and Engineering for an event where Mr. Lorne Trottier, emeritus governor, donated \$12 million to advance McGill University's Engineering and Science faculties allowing each of the two faculties to establish endowed chairs as well as fellowship funds for graduate students. Dr. Victoria Kaspi would be the first Lorne Trottier Chair in Astrophysics and Cosmology.

She then announced new appointments in the University including Michael Goldbloom for Vice-Principal (Inter-Institutional Relations), Lynne B. Gervais was appointed Associate Vice-Principal (Human Resources), Rima Rozen was appointed Associate Vice-Principal (Research and International Relations) and the Right Honourable Joe Clark as a professor of Practice for Public-Private Sector Partnerships at the McGill Centre for Developing Area Studies. The Principal noted that the Fall Convocation honored Her Excellency the Governor General Michaëlle Jean, Mr. Jean Beliveau and Mrs. Judith Mappin with honorary doctorates.

The Principal noted that McGill ranked first among medical doctoral universities in Canada in the *Maclean's* magazine 16th annual University Rankings issue. In conclusion, she congratulated members of the McGill community for their achievements including Professor Lawrence Mysak, who won the Prix du Québec, the Quebec Government's highest recognition.

3) QUESTION RE CLASSROOM SIZES

A question was posed about the classroom size of one class in Management. Dean Todd presented a very long answer as to how this situation was being handled.

4) CONFIDENTIAL REPORT OF THE HONORARY DEGREES AND CONVOCATIONS COMMITTEE

This was presented and is in an Appendix with the official minutes.

5) 384TH REPORT OF THE ACADEMIC POLICY AND PLANNING COMMITTEE

Professor Mendelson presented the Report of the Academic Policy and Planning Committee and he commented that more unused courses should be retired

6) REPORT OF THE NOMINATING COMMITTEE

Mr. Hobbins presented the Report of the Nominating Committee dealing with various committee changes.

7) MOTION TO AMEND ARTICLE 8 OF THE CODE OF STUDENT CONDUCT AND

DISCIPLINARY PROCEDURES

Interim Dean Starkey presented the motion to amend Article 8 of the Code of Student Conduct and Disciplinary Procedures. It was for minor word changes.

8) PRESENTATION BY VICE-PRINCIPAL ANN DOWSETT JOHNSTON

The Vice-Principal (Development, Alumni and University Relations) gave a brief update on Development, Alumni and University Relations and commented on the Fall 2007 campaign. About \$270M has already been collected.

9) THE 24TH ANNUAL REPORT OF THE UNIVERSITY APPEALS COMMITTEE

The 24th Annual Report of the University Appeals Committee was received with clarifications about procedures.

10) FALL 2006 ENROLMENT REPORTS

The Fall 2006 Enrolment Reports were received along with reports on Student Affairs, Student Discipline, Physical Development and Continuing Education.

The meeting concluded at about 5 pm.

(8) MEMBERS' QUESTION PERIOD

There were no members' questions.

(7) OTHER BUSINESS

There being no further business, the meeting adjourned at 5:40 p.m.