

**FACULTY OF SCIENCE  
Meeting of Faculty  
Tuesday, March 6, 2007  
Leacock Council Room - L232**

**ATTENDANCE:** As recorded in the Faculty Appendix Book.

**DOCUMENTS:** S-06-31, S-06-32

Dean Grant called the meeting to order at 3:06 p.m.

**Pre-Agenda Presentations**

Research presentations:  
Prof. Gil Holder, Department of Physics  
Prof. Michael Sullivan, Department of Psychology

Postponed Research Presentation:  
Prof. Marcus Lindstrom, Department of Chemistry

**(1) ADOPTION OF AGENDA**

Prof. Zuroff **moved**, seconded by Prof. Wolfson, that the Agenda be adopted.

**The motion carried.**

**(2) MINUTES OF FEBRUARY 13, 2007**

**S-06-31**

Prof. Ronis **moved**, seconded by Prof. Zuroff, 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**

**S-06-32**

**The Academic Committee approved the following on Tuesday, February 27, 2007:**

**SECTION A: NEW PROGRAMS**

None

**SECTION B: MAJOR PROGRAM CHANGES**

**(1) MATHEMATICS & STATISTICS**

- M.Sc.; Mathematics and Statistics (Non-thesis)

**AC-06-77**

**Associated Courses:**

MATH 640	Project 1 Change in credit weight from 6 to 8	<b>AC-06-75</b>
MATH 641	Project 2 Change in credit weight from 9 to 8	<b>AC-06-76</b>

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

**The motion carried.**

- M.Sc.; Mathematics and Statistics (Thesis) **AC-06-78**

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

**The motion carried.**

- Ph.D.; Mathematics and Statistics **AC-06-79**

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

**The motion carried.****(2) CHEMISTRY**

- M.Sc.; Chemistry (Thesis) **AC-06-84**

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

**The motion carried.**

- Ph.D.; Chemistry **AC-06-85**

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

**The motion carried.**

- M.Sc.; Chemistry; Chemical Biology Option/Concentration (Thesis) **AC-06-86**

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

**The motion carried.**

- Ph.D.; Chemistry; Chemical Biology Option/Concentration **AC-06-87**

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

**The motion carried.**

**SECTION C: NEW COURSES**

None

**SECTION D: MAJOR COURSE CHANGES****CHEMISTRY****- Changes in prerequisites**

CHEM 223	Intro Phys Chem 1 2 credits	<b>AC-06-80</b>
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CHEM 243	Intro Phys Chem 2 2 credits	<b>AC-06-81</b>
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Associate Dean Hendren **moved**, seconded by Prof. Ronis, that the above changes be approved.

**The motion carried.**

**- Changes in prerequisites**

CHEM 302	Intro Org Chem 3 3 credits	<b>AC-06-82</b>
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CHEM 345	Molec Props & Structure 1 3 credits	<b>AC-06-83</b>
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Associate Dean Hendren **moved**, seconded by Prof. Ronis, that the above changes be approved.

**The motion carried.**

**SECTION E: MINOR COURSE CHANGES (For Information Only)**

- Report on Minor Course Changes	<b>AC-06-72</b>
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**SECTION F: MINOR PROGRAM CHANGES (For Information Only)**

- Report on Minor Program Changes	<b>AC-06-P2</b>
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**SECTION G: OTHER (For Information)**

(i) <b>General Interest Courses</b>	<b>AC-06-89 (Revision 1)</b>
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**704.1** Associate Dean Hendren said that when the General Science Minor was created for the B.Sc. Liberal Program, it was specified that no General Interest Courses could be used to fulfil the General Science Minor. Document # AC-06-89 (Revision 1) was a list of Science General Interest Courses, created to formalize the courses that could not be used for the General Science Minor.

**704.2** It was pointed out that BIOL 210 should be removed from the list of General Interest Courses.

**(ii) Freshman Advising Information****AC-06-90 (Revision 1)**

- 704.3** Associate Dean Hendren briefly described the above document. The document specified courses freshmen would require for each unit offering a B.Sc. degree. Freshmen who wished to leave their options open should be sure to take all appropriate courses. The document would be used for advising freshmen and would be posted on the web.

**(5) DEAN'S BUSINESS****- Medical Schools, Graduate Schools and Other Careers**

- 705.1** The meeting moved into the Committee of the Whole, chaired by Associate Dean Burns.
- 705.2** Associate Dean Burns said that there had been many studies on what motivated students to go into science, and also many studies on what turned students off science. These studies had been carried out in relation to the ages of students. A common turn-off for young students was experiencing a bad course in science.
- 705.3** Unlike the disciplines of medicine and engineering, whose purposes and functions were readily comprehensible to the general public, science was in the position of constantly having to explain and justify itself. One useful way of accomplishing this was by outreach programs to the public.
- 705.4** Regarding careers in science, students could be encouraged to seek science careers at the CEGEP level, as well as by university-level advising. The recently introduced Freshman Interest Groups were a means of exposing freshman students to various areas of science.
- 705.5** Associate Dean Burns invited members to suggest mechanisms for communicating career paths to students, including mechanisms for encouraging students to pursue careers in science.
- 705.6** Some of the suggestions made were:
- That web pages could relate the various areas of science to potential careers, as well as to related areas of study in other fields. Similarly, web pages could be used to enable students to examine the sub-disciplines within a particular area of science.
  - That rather than attempt to define a limited number of careers that would be made available by a major in a science discipline, it should be emphasized that majoring in science could lead to virtually unlimited possibilities.
  - That the above two perspectives were not mutually exclusive.
  - That web pages could provide examples of the types of careers people with science backgrounds have made for themselves.
  - That careers were "market-driven."
  - That current society was different from that of the 1950s, when interest in science was more pervasive.
  - That perhaps there was no need to recruit students to science, since McGill's enrolment in science had increased.
  - That seminars were poorly advertized outside the hosting faculty.
  - That there was low participation by professors at Science Fairs.
  - That some units had a particularly close relationship with a CEGEP.
  - That the School of Computer Science had a particularly appealing web site.
  - That increasing the number of advisors would provide greatly improved direction for students.

**705.7** Associate Dean Burns thanked members for their participation, and encouraged them to submit to him any additional ideas they might come up with. He said that ideas would be documented and taken up with the administration.

**705.8** Dean Grant resumed the Chair.

**(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/minutes/>.

**- Senate Meeting of February 14, 2007:**

Report Prepared by Prof. Roulet, and Read by Prof. Moore

The meeting opened with condolences concerning the passing of Professor Irving Brecher of Economics at McGill, former director of the Economic Council of Canada and one of the founding directors of the International Centre for Rights and Democracy, known today as Rights and Democracy. After approval of the agenda the Principal provided some remarks. These included a description of her activities on the University Governance Committee of Quebec; the over-spending at UQAM; congratulations to the Institute for Study of Canada for the special symposium celebrating the anniversary of the declaration of human rights; the administrations activities related to federal, provincial and municipal governments on matters relevant to higher education and McGill University in particular; and her thoughts on the most recent Principal's Town Hall held on February 12, 2007.

Question Period for Members proved to be quite interesting. The first question was addressed to the Principal and asked if the Administration "could provide a detailed description of McGill's provostial model?" The Principal handed the Chair of Senate to Dean McLean so she could address the question. She began by explaining that there were many versions of a provostial model and defining McGill's model a 'full' and 'not full' was really a matter of definition. She then said one of the best ways to understand the model was to look at alternatives for provostial models in general. Without actually outlining what these alternatives were she explained the 8 of Canada's G13 universities were using a model similar to McGill's, where the Provost was seen as the "second in command to the Principal" in the hierarchy of the University reporting. The Principal also stated that 60 universities in the US, including 30 of the top 35 publicly funded universities, have adopted a provostial model. This model integrates all academic portfolios and all operations, including policy, planning and budget under the Provost. On all matters dealing with academics the Provost reports directly to the Principal. The Provost is responsible for seeing the University obtains its academic goals and mission through the administration of all academic programs; planning, renewal and strengthening core academic areas; and the assessment of academic performance of programs. In collaboration with the VP Research, the Provost is responsible for establishing the academic priorities of the University (i.e. the White Paper) and formulating a plan for raising funds to see these priorities are attained. The Provost presents the budget to the Board of Governors. The Deans and the Director of Continuing Education report directly to the Provost and engaging the Provost in the compact process and benchmarking measures of their units' performance. After this description the Principal provided further clarification by answering questions arising from her initial description. Some brave Science Senator asked "whether there was a plan to evaluate the performance and effectiveness of the provostial model" to which the Principal and the Provost responded they are constantly evaluated themselves!

A second question asked about the University's commitment to promoting undergraduate research. Deputy Provost Mendelson said that the University was dedicate to increasing

the involvement of undergraduates in research and that the Faculty of Science was an excellent model on how this could be approached. The Provost explained it was impossible to dedicated funds from student tuition fees directly to support undergraduate involvement in research. Mendelson agreed to look into providing some meaningful statistics on undergraduate involvement in research.

Senate then moved into Part B of the meeting – Motions and Reports and received the 387<sup>th</sup> Report of the Academic Policy and Planning Committee (APPC). The most relevant parts of this report to the Faculty of Science were the motions on the proposed B.Sc.; Major in Atmospheric Science; Atmospheric Chemistry and an associated Honours program and the proposed B.Sc.; Liberal Degree Program and the Core Science components in 16 areas. These motions were carried (see Senate Minutes for details).

Professor Mendelson, Deputy Provost (Student Life and Learning) moved that the words “without undue hardship” be restored into the Policy for the Accommodation of Religious Holy Days. The motion was passed.

A notice of the intention to seek approval for a motion on the Adoption of a Policy on Safe Disclosure (i.e. whistleblowing) was presented. This will be brought to the floor of Senate on March 7, 2007 as a formal motion.

Senate completed its business by receiving the Report of the Board of Governors and adjourned at approximately 16:00.

**706.1** Dean Grant thanked Prof. Moore for reading Prof. Roulet's Senate Report.

**(7) MEMBERS' QUESTION PERIOD**

There were no questions.

**(8) OTHER BUSINESS**

There being no further business, the meeting adjourned at 3:57 p.m.