ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-07-44,45  S-08-1 to S-08-10

Dean Grant called the meeting to order at 2:35 p.m.

Dean Grant introduced himself, Associate Dean (Academic) Laurie Hendren, Nicole Allard, Director of Advising Services, Associate Dean (Research and Graduate Education) Peter Grütter, and Josie D'Amico, Secretary to the Faculty of Science. Dean Grant said the Director of Advising Services would be taking over the role of Associate Dean (Student Affairs), and Peter Grütter would be replacing David Burns as Associate Dean (Research and Graduate Education).

The following new professors were acknowledged, and introduced if present at the meeting:

Atmospheric & Oceanic Science  Seok-Woo SON
Biology  Gary BROUHARD
Chemistry  Amy BLUM
Biology  Nam-Sung MOON
Geography  Natalie OSWIN
Geography  Margaret KALÁCSKA
School of Computer Science  Paul KRY
Redpath Museum  Virginie MILLIEN

The following recently tenured professors were acknowledged, and introduced if present at the meeting:

Biology  Andrew GONZALEZ
Biology  Frederic GUICHARD
Biology  Jacalyn VOGEL
School of Computer Science  Jörg KIENZLE
School of Computer Science  Mathieu BLANCHETTE
School of Computer Science  Patrick HAYDEN
School of Computer Science & Department of Mathematics &Statistics  Adrian VETTA
Geography  Sarah TURNER
Mathematics & Statistics  Nilima NIGAM
Mathematics & Statistics  Tibor SZABO
Physics  Guy MOORE

The following recently promoted full professors were acknowledged, and introduced if present at the meeting:

Earth & Planetary Sciences  John STIX
Mathematics & Statistics  Dmitry JAKOBSON
Psychology  John LYDON

All professors present at the meeting gave a very brief description of their research.
Dean Grant welcomed the new professors to the Faculty of Science, and congratulated the recently tenured professors and recently promoted full professors.

Dean Grant said that normally the first meeting of the academic year would be followed by a celebratory reception. However, since there was a Federal election that day, the reception would be held following the next meeting.

(1) **ADOPTION OF AGENDA**

Prof. Butler moved, seconded by Prof. Stix, that the Agenda be adopted.

The motion carried.

(2) **SEATING OF STUDENT MEMBERS**  

Dean Grant welcomed the student members to the first Faculty of Science meeting of the year, and asked them to stand up by way of introduction.

(3) **CANDIDATES FOR DEGREES**

(a) **Bachelor of Science**  

Ms. Allard moved, seconded by Prof. Lydon, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Science degree.

The motion carried.

(b) **Bachelor of Arts and Science**  

Ms. Allard moved, seconded by Mr. Barry, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Arts and Science degree.

The motion carried.

(c) **Diploma in Environment**  

There were no candidates for the Diploma in Environment.

(d) **Diploma in Meteorology**  

There were no candidates for the Diploma in Meteorology.

Ms. Allard further moved, seconded by Prof. Stix, 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.

(4) **MINUTES OF MAY 20, 2008**

Prof. Moore moved, seconded by Prof. Bell, that the Minutes be approved.

The motion carried.
(5) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(6) REPORTS OF COMMITTEES

(a) Nominating Committee

1. Science Nominating Committee (for information):
The Nominating Committee consists of the Science Senate Representatives; the Convenor was Prof. Laurie Hendren.

2. Science Chairs’ Council (for information):
The Science Chairs’ Council serves as an advisory committee to the Dean, and consists of the Dean, the two Associate Deans, the Director of Student Advising, 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 Student Advising.

5. Academic Committee (for approval):
The Academic Committee reviews and approves academic content taught in the Faculty of Science.

6. Scholarships Committee (for approval):
The Associate Dean of Research and Graduate Education serves as the Chair of the Scholarships Committee.

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.

8. Council of Graduate and Postdoctoral Studies (for approval):
Representatives of all faculties sit on the Council of Graduate and Postdoctoral Studies.

9. B.A. & Sc. Program Administration Committee (for approval):
The B.A. & Sc. PAC reviews changes and coordinates the administration of the B.A. & Sc. degree programs.

Prof. Wolfson moved, seconded by Prof. Harpp, that the membership of the above Committees be approved.

The motion carried.

(b) Scholarships Report

Associate Dean Grütter said that the SGPA cutoff for monetary awards had been 3.97, and the Dean’s Honour List SGPA cutoff had been 3.90.

Associate Dean Grütter moved, seconded by Prof. Stix, that the Scholarships Report be approved.
The motion carried.

**New Award**

- **David Pelletier Prizes for Graduate Research in Mathematics**  
  S-08-7

Associate Dean Grütter briefly described the new award for graduate students in the Department of Mathematics and Statistics.

Associate Dean Grütter moved, seconded by Prof. Wolfson, that the above award be adopted.

The motion carried.

(c) **Committee on Student Standing**  
  S-08-8

Ms. Allard announced that due to lack of business, there was no Report of the Committee on Student Standing.

(d) **Academic Committee**  
  S-08-9

The Academic Committee approved the following on Tuesday, September 30, 2008:

**SECTION A: NEW PROGRAMS**

**Biology/Mathematics & Statistics**

- **Joint Major in Biology and Mathematics**  
  AC-08-2

  Associate Dean Hendren introduced the above new program. She said that with the retirement of the Faculty programs, including the Faculty Program in Biology and Mathematics, there was a need for the proposed program. This program would be more rigorous than the Faculty Program in Biology & Mathematics had been.

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

  The motion carried.

**SECTION B: MAJOR PROGRAM CHANGES**

None

**SECTION C: NEW COURSES**

(1) **Anatomy & Cell Biology**

  **ANAT 416**  
  Dev., Disease and Regeneration  
  3 credits  
  AC-08-3

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

  The motion carried.

(2) **Mathematics & Statistics**

  **MATH 567**  
  Intro to Functional Analysis  
  4 credits  
  AC-08-11

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

SECTION D: MAJOR COURSE CHANGES
Atmospheric & Oceanic Sciences

ATOC 751D1/D2 Seminar in Physical Meteorology AC-08-6
Change in credit weight [from 6 to 1]

Associate Dean Hendren moved, seconded by Prof. Straub, that the change be approved.

The motion carried.

SECTION E: MINOR COURSE CHANGES (For Information Only)
- Report on Minor Course Changes AC-08-1

Associate Dean Hendren briefly described the Report on Minor Course Changes. She said that the changes were mainly housekeeping, and she encouraged units to regularly update their offerings, especially prior to the Calendar period.

SECTION F: MINOR PROGRAM CHANGES (For Information Only)
- Report on Minor Program Changes AC-08-P1

Associate Dean Hendren highlighted the Report on Minor Program Changes.

SECTION G: OTHER (For Approval)
- Use of Clickers for Examinations

Ms. Allard said that the issue had been discussed at a recent Academic Committee meeting. With clickers, students cannot pace themselves and cannot go back to a question, and students can see which buttons other students are pressing. Ms. Allard said that the Academic Committee meeting had adopted a motion on the issue of clickers, and she was now presenting the motion to Faculty.

Ms. Allard answered members' questions.

Ms. Allard moved, seconded by Mr. Barry, that if clickers were to be used for exams totalling more than 5% of the final grade, their use must be first approved by the Faculty of Science, namely by Ms. Allard, Director of Advising Services.

The motion carried.

SECTION H: OTHER (For Information Only)
(1) B.Sc./M.Sc. AC-08-15

Associate Dean Hendren introduced and described the proposed B.Sc./M.Sc. She said that since Honours students routinely participated in research, the proposal would allow them to coordinate their Bachelors and Masters degrees by beginning their Masters coursework and research earlier, and should enable students to finish the M.Sc. earlier.

Associate Dean Hendren asked for feedback, and answered members' questions.

Among the points raised were:

- That students should be able to enter the M.Sc. program in January as well as at other times.
• That while M.Sc. requirements may be different for B.Sc./M.Sc. students and those from outside McGill, there are already differences between units in the amount of coursework required from students. As well, the amount of coursework required depends on the background of students.
• That while students could apply to the program as early as U2, they could also apply during their U3 year.
• That students would be able to apply to the program while studying in another university as exchange students.
• That some units had in effect already instituted the idea. The Faculty of Science would now be formalizing within the university the concept of an integrated B.Sc./M.Sc.
• That the present proposal was a prelude to the introduction in the future of a B*/M.Sc. and a B.Sc./M*, where different disciplines would be combined with, respectively, an M.Sc. and B.Sc.

(2) **New DEC in Computer Science and Mathematics**

Associate Dean Hendren introduced the new DEC in Computer Science and Mathematics, and briefly compared the current and the new DEC. She said that eight CEGEPs had already instituted the new DEC. Students with the new DEC would be admissible to the Faculty of Science, and would be qualified to take any programs within the School of Computer Science or the Department of Mathematics & Statistics. She said that she had asked other units what additional freshman courses students would need to complete as electives to be eligible for their programs.

(7) **DEAN'S BUSINESS**

- **Principal's Prize for Excellence in Teaching**

Prof. Bruce Lennox, Chair of the Department of Chemistry, announced that Dr. Grazyna Wilczek had won the 2008 Principal's Prize for Excellence in Teaching in the category of Faculty Lecturer. He said that Dr. Wilczek had been with the Department for many years and was the driving force behind four major chemistry undergraduate laboratories. Dr. Wilczek was the undergraduate program Director and Chief Adviser in the Department of Chemistry, and was adored by her students. Dr. Wilczek has published in the scientific and the scientific education literature.

Prof. Lennox said it was an honour to introduce Dr. Wilczek to the Faculty of Science, and that he hoped many members would attend the November 14, 2008 convocation, at which she would be presented with the Principal's Prize for Excellence in Teaching.

On behalf of the Faculty of Science, Dean Grant congratulated Dr. Wilczek on her success.

(a) **Enrolment**

Associate Dean Hendren described the process of admission at McGill. She said there were a number of pools of students, of which the most important were CEGEPs, Ontario high schools, rest-of-Canada high schools, U.S. high schools and overseas high schools. The cutoff values had remained high for the current year. The Science target for B.Sc. plus B.A. & Sc. students had been 1158.5, and the actual number was 1212.5 (each B.A. & Sc. student counts as .5).

The number of applications from all pools except CEGEP students was up. However, due to demographics, the number of CEGEP applications was significantly down, and
would need attention in the future. The yield of CEGEP students registering was also
down. As a consequence of a decrease in CEGEP students and an increase in high
school students, the "U0 load" had increased significantly over the previous several
years, and would continue to increase. The Faculty should be prepared for this
increased pressure on the freshman courses.

Associate Dean Hendren said that McGill should be attempting to increase the number
of students coming from CEGEPs, and that anything units could do to increase interest
in science among Québec high school and CEGEP students would be of benefit to the
Faculty of Science.

Associate Dean Hendren informed members that beginning in Fall 2009, admission pools
would be instituted. Students from high school would apply to one of three admission
pools:

- biological and life sciences pool, consisting of students intending to major in the four
biomedical units (Anatomy & Cell Biology, Biochemistry, Microbiology & Immunology,
Physiology), Biology or Psychology.

- physical group, mathematics and computer science pool, consisting of students
intending to major in the remainder of the units in Science.

- education pool, consisting of students intending to take the concurrent B.Sc./B.Ed.
(Science for teachers) program.

At the end of U0, students would be free to choose their program from within their pool or
would apply for an intrafaculty transfer in order to change pools, or to select Microbiology
& Immunology or Neuroscience.

CEGEP students would choose from these pools plus the Neuroscience and
Microbiology & Immunology pools.

(b) **What would be the Ideal Enrolment for Graduate Students?**

Faculty moved into the Committee of the Whole, with Associate Dean Grütter as Chair.

Among the points raised were:

- That money was a limiting factor, perhaps the limiting factor, in the numbers of
  graduate students.
- That laboratory space was also a limiting factor.
- That quality of students did not seem to be an issue.
- The issue of what graduate students were being trained for. This was clear in
  the cases of medicine and law, but was not necessarily clear in science — while
  a doctoral student was trained for research, this was not really the case with a
  Masters student. This should be taken into account when considering the ideal
  number of graduate students.
- That the current average was four graduate students per professor.
- That the university had said in many documents that it would like the number of
  graduate students increased by 25%, i.e., to five students per professor.
- That in some fields, graduate students could actually be looked on as a
  hindrance, and that any proposal by the university to increase the number of
  graduate students could meet with strong resistance from some areas.
- The issue of the ideal balance between the numbers of graduate students,
  postdoctoral fellows and technicians.
• That since the tax status for postdoctoral fellows had recently changed, making them more expensive for professors, the balance would probably shift towards graduate students.

• That SSHRC seemed to be moving towards greater funding for fewer students, so graduate students could actually be making more (tax free) money than postdoctoral fellows.

• That with new scholarships paying tuition for doctoral but not Masters students, it would become more difficult to attract Masters students from outside Canada.

(5) MEMBERS’ QUESTION PERIOD

There were no members’ questions.

(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 May 21, 2008 - Prof. I. Butler

1. The Principal thanked them for their commitment to Senate, in particular those Senators whose terms will end in August 2008, including those from the Faculty of Science: David Burns, Ronald Chase, Nigel Roulet, Dominic Ryan and Sue Whitesides.

2. Provost Masi stated that a subcommittee of the Committee on Academic Salary Policy (CASP), with representation from the administration and MAUT has been working on a series of statistical analyses to try to ascertain whether or not there still exist systematic, unexplainable, and unjustifiable differences in the salaries of men and women among ranked academics at McGill. The hope is that the subcommittee will conclude its work over the summer and draft a set of conclusions for presentation and discussion in the fall.

3. The Principal noted that, fifty years ago, McGill committed to Brigadier Andrew Hamilton Gault to preserve Mt. St. Hilaire. Earlier this month, this commitment was highlighted at a ceremony uniting those who have worked to perpetuate the brigadier's vision from then until now. Neighbours, friends, and present and former employees of the Gault Nature Reserve celebrated the 50th anniversary of this unique and irreplaceable site.

4. There were four questions from one of the student senators (Mr. Itzkowitz) about Extra-Senatorial consultation. The full question and response from the Principal are in the Senate minutes.

   (a) What does the Administration view as the role of Senate in consultation at McGill? Should there be Senate representation on consultative committees, and who should select those members, under what processes?

   (b) Does the Administration seek to move away from Senate as a body for consultation, in favour of broader and more ad hoc methods? If so, why is Senate not the appropriate place for consultation?

   (c) How does the Administration see Senate consultation in terms of the Statutes?

   (d) Finally, what does the Administration see as the future of consultation, both at the Senate and more broadly, in light of the Statutes and considering the divide between administration and governance as articulated by the Principal at the March 5 Senate meeting?
In the Principal’s view and speaking for the Administration and the Secretary-General, is that there is no requirement that all consultation take place through Senate. While Senate plays a key role in our governing structure, it would not be appropriate to have Senate alone define all manner of consultation, nor serve as the only consulting body. We have a community of over 50,000 people on a day-in, day-out basis - it would be ludicrous to presume that this group here assembled could serve to give helpful, creative, informative input on all matters being considered by the Administration. Our goal has been to focus Senate's time and attention on documents that have benefited from appropriate and widespread consultation, and been developed to some degree prior to submission to Senate, with the view to getting feedback that can improve the quality of submissions. I would argue that we have had some success in achieving this goal in relation to the strategic initiatives, policies, and reports that you mentioned Senator Itzkowitz, and those I mentioned in addition. I would like to emphasize that consultation with Senate, and approval by Senate, on matters within its mandate are of course an essential element of our adherence to good governance practices, and a key component to the collegial relationship within the University, as is our ongoing attention to the separation of administration and governance. Finally, there is no statutory provision for the matter in which University consultation shall take place, nor should there be, in a community whose very nature is to be supportive of broad exchange and engagement. We favour a range of models for consultation tailored for different initiatives and we respect and adhere to our obligations to the governing bodies.

5. There were other questions about internal communication at McGill and the effects of the TA strike on the undergraduate and graduate learning experience. I refer members of the Faculty of Science to the Senate minutes for the detailed questions and responses.

6. The dissolution of the Senate Committee on Information Systems and Technology (SCIST) was approved.

7. The dissolution of the Committee on Continuing Education was approved. It will be replaced by a Subcommittee on Continuing Education, which will report to the APC.

8. The terms of reference and membership of the Committee on Student Services were approved.

9. An expanded membership for the Working Group on Senate Review was approved.

10. The right of students to write papers, examinations and theses in French, where appropriate, must be added to all course outlines.

11. The report of the Task Force on Non-tenure Track Academic Personnel was approved.

12. The Student Services Fee Schedule and the Athletics and Recreation Fee for 2008-09 were presented for comments. These proposed fees have to be approved by the Board of Governors.

13. The Principal presented her draft proposed framework for the next five years for discussion by members of Senate.

14. Provost Masi presented the University Budget for information.

Senate Meeting of September 17, 2008 - Prof. K. Franklin

Prof. Franklin will present his report at a future Faculty meeting.
(7) OTHER BUSINESS

There being no further business, the meeting adjourned at 4:05 p.m.