FACULTY OF SCIENCE ACADEMIC COMMITTEE

Minutes of the meeting held on Tuesday, November 21, 2006, at 2:30 p.m. in Arts Council Room, Arts 160.

PRESENT: Dean Grant (Chair), Associate Dean Hendren (Vice-Chair), Associate Dean Leighton;

Professors Baines, Baker, Bennett, Chmura, Drury, Jensen (replacing Prof. Martin), Moore, Precup (replacing Prof. Kemme), Ricciardi, Ronis, Silvius, Wechsler, Yau, Zetka (replacing Prof. Levine); L. Houle; N. Budd, L. Crawford, C. Haakonsen, S. Ng; M.

Osborn, M. Retrouvey; J. D'Amico.

REGRETS: A. Coutinho; Associate Dean Hendershot.

GUEST: Prof. Barbara Hales, Department of Pharmacology & Therapeutics

DOCUMENTS: AC-06-6 (Rev), AC-06-7 (Rev), AC-06-21 (Rev 3)

AC-06-22 to AC-06-24 AC-06-25A to AC-06-25P AC-06-26 to AC-06-48

Dean Grant called the meeting to order at 2:30 p.m.

(1) ADOPTION OF AGENDA

Prof. Drury moved, seconded by Prof. Moore, that the Agenda be adopted.

The motion carried.

(2) <u>MINUTES OF OCTOBER 17, 2006</u>

AC-06-23

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

The motion carried.

Secretary's Note: The document number for the Minutes of October 17, 2006 should have read **AC-06-23** and not AC-05-23.

(3) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(4) REPORT ON MINOR COURSE CHANGES

AC-06-24

(for information)

Associate Dean Hendren pointed out that MATH 348 now had MATH 133 as its prerequisite. She said that BIOL 306 now had a restriction regarding PSYC 308. This had raised the issue of anomalies in the restrictions of ANAT 321, BIOL 306, PHGY 314 and PSYC 308. These anomalies should be examined. A change in prerequisite to COMP 251 meant that COMP 251 could more easily be incorporated into other programs.

Associate Dean Hendren thanked Josie D'Amico and Christopher Johns for their work in putting together the meeting's very large Agenda.

(5) PHARMACOLOGY & THERAPEUTICS

THE FOLLOWING PROGRAMS WERE TABLED TO A FUTURE MEETING:

New Programs:

- Major in Pharmacology

AC-06-

6 (Rev.)

- Honours in Pharmacology

AC-06-7 (Rev.)

- Prof. Barbara Hales from the Department of Pharmacology & Therapeutics said that the pharmacology programs were being proposed in response to student demand and to the hiring of new faculty. There were very few Pharmacology Major programs across North America.
- The two programs had been presented to the September Academic Committee meeting. Suggestions made at that meeting had been incorporated into the revised programs being presented at the current meeting.
- A member said she was concerned that BIOL 301 had been removed from the list of Required Courses in the Pharmacology programs. Also, she felt that BIOL 373 was the most appropriate statistics course for the programs, and that MATH 203 and PSYC 204, the alternative courses that students could take, were not as suitable as BIOL 373.
- There was some discussion concerning the number of students who would enroll in the programs, and how many of them would come from existing biomedical programs. These issues were directly relevant to the number of additional students who would take BIOL 301 if this was reinstated as a required course. Associate Dean Hendren said a mechanism might have to be put in place to control the number of students in the Pharmacology programs.
- There was a discussion concerning the differences between BIOL 373 and the other two statistics courses listed, MATH 203 and PSYC 204.
- A member suggested that since CHEM 222 was a prerequisite for BIOC 311, it should be moved from the U2 Required Courses to the U1 Required Courses. Reciprocally, BIOL 202 could be moved from the U1 Required Courses to the U2 Required Courses.
- **305.7** Prof. Hales said she would prefer to reinstate BIOL 301 as a Required Course, but the Biology Department representative said she could not agree to this without consultation with the Biology Department.
- 305.8 Dean Grant suggested that the program proposals be tabled until there was a resolution of the BIOL 301 issue. A decision should also be made as to which statistics course(s) would be appropriate for the programs.

(6) Mid-Term Examinations

AC-06-22

Associate Dean Leighton drew members' attention to Document AC-06-22, concerning appropriate methods of conducting mid-term examinations in order to maintain academic integrity. A similar document would be circulated for the Winter semester.

(7) B.Sc. LIBERAL (NEW)

Associate Dean Hendren thanked members for their efforts in submitting the Core Science Components in time for the meeting. She asked members to briefly describe their Core Science Components and to highlight the relationship of the Core Science Components to their Faculty and Major programs.

Core Science Component Programs in:

- Anatomy & Cell Biology

AC-06-25P

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

The motion carried.

- Atmospheric & Oceanic Sciences

AC-06-25A

Prof. Yau **moved**, seconded by Prof. Jensen, that the program be adopted.

The motion carried.

- Biochemistry AC-06-25B

Prof. Silvius **moved**, seconded by Prof. Precup, that the program be adopted.

The motion carried.

- Biology AC-06-25C

In response to concerns that students should be given more guidance in choosing complementary courses, the Biology Department representative said that students were being given as much flexibility as possible. Also it was mentioned that without this flexibility there was relatively little difference between the CSC and the Major Program in Biology.

Prof. Zetka **moved**, seconded by Prof. Precup, that the program be adopted.

The motion carried.

- Chemistry; Biological Option

AC-06-

25D

- Chemistry; Physical Option

AC-06-25E

- Chemistry; General Option

AC-06-25F

Prof. Ronis **moved**, seconded by Prof. Precup, that the above programs be adopted.

The motion carried.

- Computer Science

AC-06-25G

Prof. Precup **moved**, seconded by Prof. Moore, that the program be adopted.

The motion carried.

- Earth & Planetary Sciences

AC-06-25H

Prof. Jensen **moved**, seconded by Associate Dean Leighton, that the program be adopted.

The motion carried.

- Geography AC-06-25I

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

The motion carried.

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

Prof. Drury **moved**, seconded by Prof. Precup, that the above programs be adopted.

The motion carried.

- Microbiology & Immunology

AC-06-25L

Prof. Baines **moved**, seconded by Prof. Wechsler, that the program be adopted.

The motion carried.

- Physics AC-06-25M

Prof. Moore **moved**, seconded by Prof. Jensen, that the program be adopted.

The motion carried.

- Physiology AC-06-25N

Prof. Wechsler **moved**, seconded by Prof. Precup, that the program be adopted.

The motion carried.

- Psychology AC-06-250

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

The motion carried.

- 307.3 Dean Grant thanked members for their efforts in the difficult task of putting together the Core Science Components on very short notice. He thanked Associate Dean Hendren for her hard work in guiding the process.
- Mr. Ng, student representative and V.-P. (Academic) of SUS, said that he had convened a meeting of departmental student representatives to discuss the proposed B.Sc. Liberal program. A vote was held and the proposed program received support from the vast majority of students.

(8) PROPOSED B.Sc. FRESHMAN PROGRAM

AC-06-21 (REV 3)

- Associate Dean Hendren introduced the above document. She said that McGill's admission requirements were more rigorous than, for example, the University of Toronto's. Consequently, there was no need for McGill's Freshman Program to be as inflexible as it currently was.
- Associate Dean Hendren briefly described the current Freshman Program, and then described the proposed new Freshman Program. She said the proposed program was an attempt to balance breadth with flexibility, to allow students to prepare for their major program as well as be able to take some electives.
- The suggested Freshman Program was described in Section 3.1 of Document # AC-06-21 (Rev 3). The rest of the document listed approved freshman courses, and gave examples of scenarios of courses freshmen might take.
- **308.4** Among the points raised were:
 - That the current Freshman Program provides a compulsory breadth of knowledge in Science. The proposed program would potentially allow some students to avoid taking any biology course at McGill. Scheduling conflicts could be resolved by maintaining the current Freshman Program, but allowing students to postpone taking some of the courses. For example, a student intending to Major in the physical sciences could postpone the biology requirement to a later year.
 - That the proposed Freshman Program was more flexible than the current program.
 - ❖ That students taking computer science and mathematics in the B.A. program would be more likely to take these subjects in the B.Sc. program if the requirements for breadth were made more flexible.
 - ❖ That with the current Freshman Program, the units of Atmospheric & Oceanic Sciences, Computer Science, Earth & Planetary Science, Geography, and Psychology tended to be "frozen out" of students' choices.
 - ❖ That if students had the option of avoiding a biology, chemistry or physics course, they probably would.
 - ❖ That some programs at McGill may do students a disservice by not allowing a large degree of breadth. In the final analysis it was not really important whether or not an individual course was taken.
 - That the current structure of the Freshman Program was a major problem for Computer Science and Mathematics & Statistics students, and some would-be Computer Science students actually were going to the Faculty of Engineering.
 - ❖ That the proposed Freshman Program would allow students who already know what their major subject is to advance more rapidly.
 - That the flexibility of the proposed Freshman Program would make it easier for students with advanced standing to complete the requirements for the Freshman Program.

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

308.5 A vote was held.

In favor: 11 Against: 7 Abstentions: 4

The motion carried.

(9) MATHEMATICS & STATISTICS

New Course:

MATH 533 Honours Regression and ANOVA

AC-06-26

4 credits

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

The motion carried.

B.Sc. Program Changes:

Honours in Mathematics
 Honours in Applied Mathematics
 Honours in Probability and Statistics

AC-06-28
AC-06-29

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

The motion carried.

(10) **GEOGRAPHY**

Program Changes:

- M.Sc. in Geography

AC-06-30

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

The motion carried.

(11) ANATOMY & CELL BIOLOGY/BIOCHEMISTRY/MICROBIOLOGY & IMMUNOLOGY/ PHARMACOLOGY & THERAPEUTICS/PHYSIOLOGY

Program Changes:

- B.A. & Sc. Major Conc. in Biomedical Sciences

AC-06-31

Prof. Wechsler **moved**, seconded by Prof. Moore, that the program changes be approved.

The motion carried.

(12) ATMOSPHERIC & OCEANIC SCIENCES

New B.Sc. Program Option:

- Major in Atmospheric Science; Atmospheric Chemistry Option

AC-06-32

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

The motion carried.

New B.Sc. Program Option:

- Honours in Atmospheric Science; Atmospheric Chemistry Option

AC-06-33

Prof. Yau **moved**, seconded by Prof. Ronis, that the program be adopted.

The motion carried.

(13) ATMOSPHERIC & OCEANIC SCIENCES/EARTH & PLANETARY SCIENCES

Program Changes:

- B.A. & Sc. Major Conc. in Earth, Atmosphere & Ocean Sciences

AC-06-34

Prof. Yau moved, seconded by Prof. Ronis, that the program changes be approved.

The motion carried.

(14) CHEMISTRY

Program Changes:

Major in Chemistry; Atmosphere & Environment Option
 Honours in Chemistry; Atmosphere & Environment Option

AC-06-35

AC-06-36

Prof. Ronis **moved**, seconded by Prof. Yau, that the program changes be approved.

The motion carried.

(15) PSYCHOLOGY

New Course:

PSYC 502 Psychoneuroendocrinology

AC-06-37

3 credits

New Course:

PSYC 512 Advanced Personality Seminar

AC-06-38

3 credits

B.Sc. Program Changes:

- Major in Psychology - Honours in Psychology AC-06-39

AC-06-40

- B.A. & Sc. Joint Honours Component in Psychology

AC-06-41

Prof. Baker **moved**, seconded by Prof. Precup, that the above new courses and program changes be approved.

The motion carried.

(16) COMPUTER SCIENCE

New Course:

COMP 280 Hist and Phil of Computing

AC-06-42

3 credits

New Course:

COMP 321 Programming Challenges

AC-06-43

1 credit

New Course:

COMP 322 Introduction to C⁺⁺

AC-06-44

1 credit

New Course: COMP 364 Comp. Tools for Life Sciences

AC-06-45

3 credits

B.Sc. Program Changes:

- Major in Computer Science AC-06-46
- Major in Software Engineering AC-06-47
- Minor in Computer Science AC-06-48

Prof. Precup **moved**, seconded by Prof. Moore, that the above new courses and program changes be approved.

The motion carried.

For Information (Documents available upon request):

B.A. Minor Concentration in Computer Science

(17) OTHER BUSINESS

There was no other business.

The meeting adjourned at 4:55 p.m.