

**FACULTY OF SCIENCE
ACADEMIC COMMITTEE**

Minutes of the meeting held on Tuesday, December 12, 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 Baker, Bennett, Chmura, Drury, Kemme, Levine, Martin, Moore, Ronis, Wechsler, Yau; L. Houle; A. Coutinho, C. Haakonsen; J. D'Amico.

REGRETS: Professors Baines, Ricciardi, Silvius; Associate Dean Hendershot; N. Budd, L. Crawford, S. Ng, M. Osborn, M. Retrouvey.

DOCUMENTS: **AC-06-17,17A** **AC-06-49** to **AC-06-62**

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

(1) ADOPTION OF AGENDA

- Ad hoc Major in Pharmacology (AC-06-61) to be considered under Item #12, Other Business.

 Prof. Levine **moved**, seconded by Mr. Haakonsen, that the amended Agenda be adopted.

The motion carried.

(2) MINUTES OF NOVEMBER 21, 2006 **AC-06-49**

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

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

- **Minutes 305.1 to 305.8**

403.1 Dean Grant said that Prof. Hales was currently away, but would be back for the January 2007 meeting. The proposed Major and Honours Programs in Pharmacology would be considered at that meeting.

(4) REPORT ON MINOR COURSE CHANGES **AC-06-50
 (for information)**

 Associate Dean Hendren drew members' attention to the Report.

(5) CALCULUS 3

405.1 Prof. Drury tabled a document (#AC-06-62) describing the current situation with Calculus 3, and proposing several possible solutions.

405.2 Prof. Drury said that Calculus 3 was not being well taught in some CEGEPs, and the situation seemed to be getting worse. Calculus 3 was a prerequisite to advanced

calculus courses, which were required for a number of programs. The instructors in the advanced calculus courses were spending so much time reviewing Calculus 3 topics that they were unable to finish the advanced calculus courses.

- 405.3** Prof. Drury said it was necessary to find a solution to the problem, as the status quo was not viable. He went over the possible solutions outlined in Document AC-06-62, and asked members for feedback. He said he would like to bring a proposal to the Academic Committee later in the current academic year.
- 405.4** The Department of Chemistry representative said that his department experienced an analogous problem, with standards differing a great deal from CEGEP to CEGEP for Organic Chemistry 1. The Chemistry Department evaluated each CEGEP to determine equivalencies.
- 405.5** There was some discussion about the possibility of instituting a placement test for Calculus 3. A recommendation would be brought to the Academic Committee at a future point.

(6) BIOLOGY

Program Changes:

- Major in Biology
- Honours in Biology

AC-06-51

AC-06-52

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

The motion carried.

(7) PHYSIOLOGY

PHGY 202	Human Body: Body Functions Changes in restriction and description 3 credits	AC-06-53
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- 407.1** The Physiology representative said that she had just heard the previous day that Physical & Occupational Therapy students, for whom PHGY 202 was intended, would no longer be requiring the course. A course retirement proposal for PHGY 202 would be presented at the next Academic Committee meeting.

PHGY 209	Mammalian Physiology 1 Changes in prerequisites and description 3 credits	AC-06-54
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PHGY 210	Mammalian Physiology 2 Changes in prerequisites, restriction, and description 3 credits	AC-06-55
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- 407.2** For both PHGY 209 and PHGY 210, "CHEM 212 or equivalent" should be considered as a pre-/co-requisite.

- 407.3** For both PHGY 209 and PHGY 210, rather than "Collegial courses in biology or anatomy, and in chemistry and physics," the prerequisites should read:

"BIOL 112, CHEM 110, CHEM 120, PHYS 101 or PHYS 131 and PHYS 102 or PHYS 142"

Prof. Wechsler **moved**, seconded by Prof. Ronis, that the changes for PHGY 209 and PHGY 210 be approved.

The motion carried.

PHGY 311	Channels, Synapses & Hormones Changes in title and prerequisites 3 credits	AC-06-56
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Prof. Wechsler **moved**, seconded by Prof. Chmura, that the changes be approved.

The motion carried.

PHGY 314	Integrative Neuroscience Changes in restriction and prerequisites 3 credits	AC-06-57
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Prof. Wechsler **moved**, seconded by Prof. Levine, that the changes be approved.

The motion carried.

New Course:

PHGY 425	Analyzing Physiological Sys. 3 credits	AC-06-58
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After some discussion concerning the possibility of a mathematics prerequisite course for PHGY 425, Prof. Wechsler **moved**, seconded by Prof. Chmura, that the course be adopted.

The motion carried.

New Course:

PHGY 560	Light Microscopy-Life Science 3 credits	AC-06-59
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Prof. Wechsler **moved**, seconded by Prof. Bennett, that the course be adopted.

The motion carried.

(8) BIOLOGY/PHYSIOLOGY/PSYCHOLOGY

- Major Program in Neuroscience		AC-06-60
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408.1

A number of typographical errors in the program were pointed out. It was suggested that under Stream C: Cognitive/Behavioural Stream, there should be courses in ecology, animal behaviour and animal learning, and it was also mentioned that there were no courses from the Biology Department in Stream C.

Associate Dean Hendren **moved**, seconded by Mr. Haakonsen, that the program changes be approved.

The motion carried.

(9) Associate Dean (Student Affairs) Henry Leighton:**(i) SUPPLEMENTAL/DEFERRED EXAMS**

409.1 Associate Dean Leighton explained that where a course was offered in both the Fall and Winter terms, the Winter term final exam could be used as a Supplemental/Deferred exam for the Fall term course. Where different instructors gave the course in the Fall and Winter terms, there could be significant differences in emphasis, or even in the weighting between class work and final exam. Furthermore, using the Winter term final exam as a Fall term Supplemental/Deferred exam meant a fuller exam schedule, and an increased risk of an exam conflict.

After a brief discussion, Associate Dean Leighton **moved**, seconded by Prof. Chmura, that where a course is offered in both the Fall and Winter terms, the Winter term final exam not be used as a Supplemental/Deferred exam for the Fall term course.

The motion carried.

(ii) BULLETING COURSES IN CALENDAR

409.2 Associate Dean Leighton explained that bullets traditionally had been placed next to courses in the Calendar that were not expected to be offered in the current year. The system was not entirely accurate, but a disclaimer on each page emphasized this. A number of faculties had stopped using bullets, and the Faculty of Science had also been asked to stop. Associate Dean Leighton asked for members' feedback on the issue.

Following a discussion, Associate Dean Leighton **moved**, seconded by Mr. Haakonsen, that bulleting and unbulleting of courses continue to be used in the Science section of the Calendar.

The motion carried.

(10) MINI-THEME:

The Delivery & Evaluation Mechanisms of Undergraduate Science Courses, Point #2, Evaluation throughout the term versus evaluation via a 100% final exam

AC-06-17/17A

410.1 Associate Dean Hendren said that at the current meeting, the Academic Committee would be returning to the discussion of mechanisms for the delivery and evaluation of undergraduate courses. The results of the discussions would be used to form a set of guidelines for courses in the Faculty of Science. The current day's discussion would concern the evaluation of courses throughout the term, as opposed to evaluation by way of a 100% final exam.

410.2 Among the points raised in the discussion were:

- That 100% final exams placed unnecessary stress on students, and did not allow students the luxury of a bad day.
- That a great deal of stress is placed on students when final exams, even if not 100%, are weighted highly and happen to be scheduled close together.
- That with 100% final exams neither students nor professors could monitor themselves throughout the term. Furthermore, professors could not monitor the performance of the class.
- That any examination of the issue of 100% final exams should also look at Supplemental/Deferred exams.

- That final exams allow the testing of integrated knowledge, as opposed to, say, testing after each of a series of modules.
- That mid-term exams, and in general testing throughout the term, force students to learn material throughout the term, which is academically preferable to simply "cramming" for a final exam.
- That mid-term exams should be structured in a manner very similar to final exams, to enable students to become familiar with final-exam format.
- That there were ways apart from mid-term exams of testing students' knowledge throughout the term, such as assignments, projects, presentations, etc.
- That a great many exams were multiple choice, which was restrictive both in terms of modes of testing and in terms of modes of learning.
- That to the extent that mid-term exams and other class tests were rendered more significant, there should be increased security, invigilation, etc.
- That in some mid-term exams cheating is rife, and that it would be preferable to have 100% final exams than to give mid-term exams under poor security conditions.
- That more resources should be provided to enable professors to hold mid-term exams and other non-final exams. It was mentioned that some classes have as many as 1100 students. Among other items, space was a critical issue.
- That the Centre for Teaching & Learning be consulted, with respect both to methods of testing and to means of overcoming limited resources.

- (11) **MATHEMATICS & STATISTICS** (*For Information Only*)
Program Changes for Engineering Students:
 - Minor in Mathematics

(12) **OTHER BUSINESS**

- Ad hoc Major Program in Pharmacology

AC-06-61

Associate Dean Leighton **moved**, seconded by Associate Dean Hendren, that the ad hoc program be approved.

The motion carried.

There was no other business.

The meeting adjourned at 4:20 p.m.