FACULTY OF SCIENCE Meeting of Faculty Tuesday, 19 April, 2016 Leacock Council Room - L232

ATTENDANCE: As recorded in the Faculty Appendix Book

DOCUMENTS: S-15-27, S-15-28

Dean Lennox called the meeting to order at 3:05 p.m.

1) ADOPTION OF AGENDA

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

The motion carried.

2) LEO YAFFE TEACHING AWARD

902.1 Dean Lennox introduced Prof. Edith Zorychta, Chair, Leo Yaffe Award/Principal's Prizes Committee.

902.2 Prof. Zorychta said that the Leo Yaffe Award is given each year to recognize superior teaching at the undergraduate level in the Faculty of Science.

902.3 The nominees for the 2015-2016 Leo Yaffe Award were:

Prof. Lauren Chapman, Biology

Prof. Henri Darmon, Mathematics & Statistics

Prof. Melanie Dirks, Psychology

Prof. Samantha Gruenheid, Microbiology & Immunology

Prof. Derek Ruths, Computer Science Prof. Martin Schmeing, Biochemistry

Prof. Alvin Shrier, Physiology

902.4 Prof. Zorychta said that the nominees for the Award were excellent, and that the choice had been very difficult. The Committee was highly impressed with the quality of teaching in the Faculty of Science. She announced that the winner of the Leo Yaffe Award for the

Professor Darmon was once a student in the classes that he now teaches. receiving a BSc from McGill prior to his PhD from Harvard. His graduate work led to a position at Princeton, but fortunately, after a few years he returned to McGill and quickly established himself as one of Canada's leading mathematicians. He is internationally recognized for his research in number theory, and his outstanding ability to communicate abstract concepts with precision and eloquence has made him a highly desirable speaker at conferences and special events. Throughout his career the exciting research, extensive travel and a long list of awards have never altered his dedication to the undergraduate classroom. Characteristically, he has expressed his philosophy of teaching with clarity and precision in the following statement: "opening up new areas for mathematical exploration is an empty activity if there is no one to explore it. Because of this, conveying the excitement and beauty present within mathematics to new generations of students is perhaps the single most fundamental contribution to the growth and health of the subject." The tributes from his students reflect how effective he has been in accomplishing this.

Three main themes recur in student comments about Henri's teaching. They emphasize his intelligence and depth of knowledge, demonstrated by his ability to answer any question with ease, and his skill in explaining abstract concepts in language that is so crystal clear they can understand him at a level they did not previously think was possible. Typical statements include "he knows the material inside out", "his brilliance and enthusiasm are both invigorating and addictive", "a fantastic teacher, he takes a very abstract notion of algebra and makes it accessible through patient, illuminating lectures", "the way he approaches the material gives the impression that he is reureseth clbct hala92uage thwhir tbriJ -19.4e never

In summary, student evaluations are filled with gratitude for the most effective teacher that many of them have ever had and they consider it a privilege to listen to him – sometimes being sad when class ends because it is so interesting. They handle a heavy workload, difficult assignments and challenging exams with praise for his courses that are so well organized and his teaching that is so exceptional. They emphasize that he has changed their lives by introducing a clarity and level of understanding they could not have achieved without him. Former students who have become teachers consider him their role model for what a teacher should be, and they aspire to be like him. Professor Henri Darmon has an impact beyond time and place and is an ideal recipient of the Leo Yaffe Award."

902.7 Dean Lennox thanked Prof. Zorychta for the wonderful citation, and he thanked Prof.

Secretary's Note: Director Nicole Allard has pointed out that the course should not be available for B.A. & Sc. and B.Sc. students. This will be reflected in the course proposal form.

SECTION B: COURSE AND PROGRAM REVISIONS

(1) <u>Physics</u> PHYS 228

Energy and the Environment Changes: renumbered from [-184], prerequisites, restrictions AC-15-58

Associate Dean Western explained that the original number of the course had actually been PHYS 228, and that it had been renumbered to PHYS 184. With the addition of a prerequisite, the Department felt that PHYS 228 was a more appropriate number. Furthermore, the number PHYS 228 would allow the course to be included as a Complementary course in the B.A. & Sc., B.Sc. Minor in Physics, and B.A. & Sc. Major Concentration in Physics, as well as several Environment programs (see Section 1A,

Associate Dean Western moved, seconded by Prof. Grütter, that the changes be approved.

The motion carried.

B.Sc. & B.A. & Sc. Program Changes:

- B.Sc. Minor in Physics

below).

AC-15-59

Associate Dean Western moved, seconded by Prof. Grütter, that the changes be approved.

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Major Concentration Chemistry with Minor Physics for Teachers (135 credits)

- Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) Major Concentration Biology Organismal with Minor Physics for Teachers (135 credits)
- Concurrent Bachelor of Science (B.Sc.) and Bachelor of Education (B.Ed.) Major Concentration Biology-Cell/Molecular with Minor Physics for Teachers (135 credits)

(1A) PHYS 228/Environment

Additionally, PHYS 228 will be included in the following Environment Programs, under the Natural Sciences and Technology Section of the <u>Suggested Courses List</u>:

- Minor in Environment
- Minor Concentration in Environment
- Diploma in Environment
- 905.5 In all the above three Environment programs, PHYS 228 was added as a Complementary course.

(2) Physics and Chemistry:

- B.Sc. Honours in Physics and Chemistry

AC-15-62

905.6 Associate Dean Western said that the changes were simply housekeeping. Two courses (CHEM 253, CHEM 263, 1 credit each) had been combined into a single course (CHEM 283, 2 credits), and the changes reflect this. Also, the program had been reformatted.

Associate Dean Western moved, seconded by Prof. Grütter, that the changes be approved.

The motion carried.

(3) <u>Microbiology & Immunology</u>

Associate Dean Western moved, seconded by Prof. Dudek, that the changes be approved.

The motion carried.

(4) Interdepartmental Honours in Immunology Program Changes AC-15-66

905.10 Associate Dean Western said that these were more housekeeping changes. The recent replacement of BIOC 300D1/D2 (6 credits) with BIOC 220 and BIOC 320 (3 credits each) was being reflected.

Associate Dean Western moved, seconded by Prof. Mucci, that the changes be approved.

The motion carried.

- Associate Dean Western reminded members that guidelines had been put together about six years ago by the Academic Committee and the Faculty of Science, concerning appropriate levels and prerequisites for courses. These are available from Associate Dean Western or Josie D'Amico.
- 905.12 Dean Lennox said that Faculty of Science meetings were not simply a rubberstamp of Academic Committee decisions, but it was a function of Faculty meetings to consider, and if necessary reject, decisions made by the Academic Committee.

6) DEAN'S BUSINESS

- a) Announcements
- 906.1 Dean Lennox announced the following items of interest to the Faculty of Science:

Recent appointment of Dr. Heather McShane in a dual role as (1) Research Liaison Support Officer for the Faculty of Science, working closely with Associate Dean (Research) Doina Precup in coordinating grant applications with Faculty researchers; (2) Coordinator of the McGill Sustainability Initiative, which encompasses the entire University.

Science Convocation will be held on the day of 6 June 2016 on the Downtown Campus, with a stellar list of luminaries on stage. Honorary Degrees will be presented to (1) Dr. Paul T. Anastas, founder of Green Chemistry, and (2) Dr. Vinton Gray Cerf, one of the founders of the Internet. Faculty of Science members should attend the Science Convos asn,9.2(Gcien m0n)4.9 Campus,

906.2	Dean Lennox announced the following details regarding the budget.
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The University Administration's budget process is now finalized in terms of preparation of

Canada-Wide Science Fair (CWSF) to be held at McGill on Monday, 16 May to Friday, 20 May 2016. This is a great opportunity to interact with top high-school students from across Canada, and a great opportunity for recruitment. Departments have been contacted regarding setting up booths and sponsoring activities, and should pull out all the stops in an effort to impress students with what the Faculty of Science and McGill have to offer. Grateful thanks to departments and to volunteers.

907.4 Dean Lennox said that the chaperones accompanying the students would be influential in students' choices, and that members of the Faculty of Science should not neglect to talk to the chaperones and to impress on them the benefits of attending McGill. He added that he had spoken to Prof. David Lowther, and that the Faculty would be sponsoring a Wine and Cheese event for the judges.

8) MEMBERS' QUESTION PERIOD

There were no members' questions.

9) OTHER BUSINESS

909.1 Mr. Victor Chisholm introduced Ms. Sandra Crescenzi, Administrative Coordinator, who will be working with Associate Dean Western and Josie D'Amico.

Prof. Lydon moved, seconded by Prof. Mucci, that the meeting be adjourned at 3:50 p.m.

The motion carried.