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## UNIVERSITY OF TORONTO

### Memorandum

Date:

December 16, 2003

To:

Professor Carolyn Tuohy, Vice-President, Policy Development and

Associate Provost

C.C.

Mr. Andrew Drummond, Special Projects Officer, Office of the Governing

Council

From:

Paul McCann, Faculty Secretary, Faculty of Arts and Science

Re:

Major Calendar Changes for 2004-05

As required by policy, I am submitting on behalf of the Faculty of Arts and Science a summary of major additions and deletions to the Faculty's programs for the 2004-05 academic year.

I note that there are no additional resource requirements for the new programs listed herein.

The program additions and deletions were vetted by the Faculty's Humanities, Social Sciences, and Sciences Curriculum Committees at their meetings of October 4, 5, and 6 2003 respectively and by the Faculty's Committee on Standing at its meeting of December 8, 2003.

## A. New Programs

1.0 Environmental Studies: Environmental Ethics Minor (BA): Jointly sponsored by the Division of the Environment and the Department of Philosophy. This program explores how value judgements and worldviews affect environmental decision-making.

Requirements: 4 full courses or their equivalent

- 1. PHL273H1
- 2. PHL373H1
- 3. JIE222Y1
- 4. Two FCEs in PHL, with at least one half course at the 300-level or above. It is recommended that one course be in the History of Philosophy and the other in the Problems of Philosophy, including one half course in ethics.

Academic Relevance: The program will give credit to philosophers who have focused their studies on questions of environment and it will similarly provide an acknowledgement for students in environmental programs that they have addressed questions of underlying values and ethics.

Estimated Enrolment: Initially 10 with growth expected.

# 2.0 Italian: Italian Culture and Communication Studies Minor (BA):

Requirements: 4 full courses (or equivalent) including one full course equivalent from any of the following: ITA 340Y/441H/347ITA360H/361H/363H/364H/430H/365HITA356Y/357Y/358Y/359Y ITA371Y/471Y/472YITA385H

Academic Relevance: This program replaces a series of Minor Programs in Italian which have been undersubscribed in recent years and for which it has become increasingly difficult to offer the required courses for completion on a regular basis. This new Minor offers students the possibility of completing a Minor Program in Italian in an area other than literature.

Estimated Enrolment: 50-75

3.0 New College: Paradigms and Archetypes Minor (BA)

Requirements: 4 full courses or their equivalent

- 1. **NEW** 209Y1
- 2. **NEW 301Y1/304Y1**
- One full course equivalent from NEW 301Y1 (if not chosen in 2 above), NEW 302Y1, NEW 303H1, NEW 304Y1 (if not chosen in 2 above), NEW 306H1, NEW 308H1, NEW 402Y1, NEW 403H1, NEW 404H1

One full course equivalent from HPS 201H1, HPS 202H1, HPS 4. 210H1, HPS 211H1, HPS 250H1; NMC 101Y1, 185Y1, 201Y1; RLG 101Y1, 204Y1, RLG 205Y1, RLG 206Y1, RLG 211Y1, RLG 231H1; any NEW courses listed in 3 above.

Academic Relevance: For many years, New College sponsored a Humanism minor program in which canonical works from literary, philosophical, religious and scientific traditions were subjected to critical scrutiny and interrogation (rather than to exposition or celebration). Over the years, courses were added with South Asian perspectives (Rabindranath Tagore and Satyajit Ray) and then through the analytical psychology of Karl Gustav Jung. These latter courses (Tagore, Ray and Jung) were supported by private donations and have been successful in attracting significant numbers of students.

As the College considered the phasing out of the Humanism program (a recommendation of Arts and Science under Raising Our Sights), the question of how the popular funded course could be grouped together in a program became more pressing. Students made it clear that they wanted the option of including these in a minor program.

The Paradigm and Archetypes program proposal grows out of this situation. We aim to provide a small suite of courses that allow students to perceive patterns in human discourse that they can examine critically rather than taking them for granted. Models for organizing thought and experience into stories, dilemmas and analogies (as the titles of three courses suggest), and models for understanding consciousness through universal archetypes (as posited in analytical psychology) are brought together to show how powerful such organizing principles can be and to enable students to develop critical distance that they can carry with them into all their academic work and beyond.

New College is strongly committed to challenging students to break out of traditional modes of thought, particularly those that are conditioned by hegemonic discourses. We do this though our various major and specialist programs with respect to gender, race, disability and other categories by which people are grouped. This particular minor program, however, urges the most radical questioning of the way in which we as human beings make sense of our world and our experience in it. It can work for students in all of the streams, equipping them with the tools of critique out of which radically new knowledge can emerge.

Estimated Enrolment: 15-20

## 4.0 University College: Sexual Diversity Studies Major (BA) (Humanities and Social Science)

Requirements: At least 6 full course equivalents of which at least 2 must be drawn from the 300 series level, including the following:

1. UNI 255H History and Perspectives in Sexual Diversity UNI 256H Sexualities: Social, Organizational, and Legal Contexts

2. At least one of: UNI 354H Theories of Sexuality: The Foundations UNI 355H Contemporary Theoretical Perspectives on Sexuality 3. At least two of:
POL 315H Sexual Diversity Politics
UNI 365H Sexuality and the Law
ENG 273Y Introduction to Gay and Lesbian Literature

- 4. At least two full course equivalents from List A. (see included list)
- 5. Any remaining course requirements may be drawn from List B. (see included list)

Academic Relevance: The program is one of the most ambitious of its kind in Canada and the U.S., and the decision to offer a major reflects the wealth of research and knowledge in the field of sexuality studies. Not only has there been an explosion in exciting and innovative work in the area; classic texts are being mined for new insights in light of current scholarship. Because the program is interdisciplinary, students are able to explore the way the study of sexuality affects and is affected by a variety of other disciplines, including Language and Literature, History, Political Science, Anthropology, Drama, Criminology, Medieval and Renaissance Studies, Psychology, Sociology, Women's Studies, Equity Studies, Fine Arts, and Cinema Studies. Students are not only trained in the complexity and richness of interdisciplinary work, they are also equipped with the tools necessary to further their investigations in their other chosen specialities.

Estimated Enrolment: 30

# 5.0 Economics: Economic History and Economics Specialist Program (BA)

Requirements:

Enrolment in this program is limited to students with 63% in ECO100Y, or 80% in ECO105Y, or who have passed ECO100Y and have a CGPA of 2.50.

### First Year:

ECO100Y/105Y; MAT133Y/135Y/137Y

### Higher Years:

- ECO200Y/206Y, ECO202Y/208Y, ECO220Y/227Y/STA(250H,255H)/(257H,261H)
- 2. Four Economic History courses from ECO301Y,302H,303Y,306Y,321Y,342Y,353Y,354H,355H,423H,429Y, 435H,452H,457Y,1 HIS course
- Four additional ECO courses (not from above list)

Academic Relevance: The Department of Economics can no longer offer a wide enough range of courses in Economic History to sustain a Specialist Program in that discipline. The proposed program therefore replaces the existing Specialist Program in Economic History and allows students interested in Economic History to earn a Specialist B.A. by combining studies in that area with more theoretical work in Economics. A student could currently complete a major in Economic History and another major in Economics; we feel that combining these two into a Specialist program will enhance the attractiveness of Economic History (in the same way as in Specialist program in Economics and Geography, Economics and Philosophy, etc.)

Estimated Enrolment: 2-5

6.0 Molecular Genetics and Microbiology Specialist Program (MGY) (B.Sc.)

Requirements: Enrolment in this program is limited and selection is based on performance in first year required courses. Students apply at the end of the first year via the Faculty's Subject POSt web site. At later times, they may contact the Undergraduate Coordinator.

14 full course or their equivalent
First Year BIO150Y1; CHM138H1, CHM139H1; MAT135Y1/
MAT137Y1; PHY110Y1/PHY138Y1/PHY140Y1
(PHY138Y1 recommended)
Second Year:BCH242Y1; BIO250Y1, BIO260H1; CHM220H1,
CHM247H1

Third Year:

Genetics Stream: BCH340H1, BCH371H1; MGY311Y1, MGY312H1 plus At least 0.5 full-course equivalents must be taken from BCH335H1, CHM347H1, MGY377H1, MGY378H1

Microbiology Stream IMM335Y1; MGY311Y1, MGY376H1, MGY377H1, MGY378H1

Fourth Year:

Genetics Stream:
MGY420H1, MGY432H1 plus
At least 1.5 full-course equivalents must be taken from list 1:
MGY425H1, MGY428H1, MGY451H1, MGY452H1, MGY460H1,
MGY470H1 plus Up to 1.0 full-course equivalent may be taken from list
2:BCH422H1, 440H1, 441H1; BIO461H1, 472H1; HPS333H1;
MGY434H1, 440H1, 445H1, 480Y1;ZOO328H1

Microbiology Stream: MGY432H1 plus
At least 1.5 full-course equivalents must be taken from list 1:
LMP 402H1, 436H1; MGY 420H1, 428H1, 434H1, 440H1, 445H1,
485H1
Up to 1.0 full-course equivalent may be taken from list 2:
BCH 304H1, 305H1, 335H1, 340H1, 422H1, 426H1, 441H1, BOT
404H1, 405H1,452Y1, IMM 430H1, JBI 428H1, LMP 403H1, MGY
425H1, 451H1, 452H1, 460H1, 470H1, 480Y1

### Background to the Proposal

The proposed MGY program is a merger of the two undergraduate Specialist programs for which our Department is responsible, the Molecular Genetics & Molecular Biology (MGB) and Microbiology (MBY) programs. The primary reason for the merger is to integrate both Specialist streams; that is, to provide a more common academic experience for students in our programs and to reflect the scientific expertise of our Department. The idea for a merger of the undergraduate Specialist programs arose from the merger of the Department of Medical Genetics and the Department of Microbiology in 1996, as well as from a desire to increase the molecular background for the Microbiology students. New Microbiology faculty have been hired since

1998, which has increased the Department's expertise in molecular aspects of Microbiology. There is clearly overlap between the disciplines of genetics and microbiology, which the new program will emphasize.

In the current status quo, Microbiology Specialist students do not take the more "intensive" biochemistry and molecular biology courses that are required of the MGB Specialists, and thus are prevented from taking advanced molecular courses that are offered in our Department. In the new MGY program, all students will take a common second year, including a full credit of Biochemistry.

The new MGY program is divided into two streams ("Genetics" and "Microbiology"), which retain the character of the old MGB and MBY Specialist programs, but both streams will have a common molecular biology experience. Students will choose their stream by the start of their third year. They will have a common molecular biology course in 3rd year (MGY311Y) and a common molecular genetics & microbiology lab course in 4th year (MGY432H). Because the students take the same prerequisite courses, there will be more opportunity for students in one stream to take courses in the other.

#### Academic Rationale:

Molecular biology has revolutionized the fields of genetics and microbiology. The Department of Medical Genetics and Microbiology offers a combined Specialist program in Molecular Genetics and Microbiology, which emphasizes the molecular aspects of both disciplines. Genetics, the science of heredity, and microbiology, the study of microorganisms (microbes), have long served as meeting grounds for a variety of biological disciplines. Developments in genetics and microbiology have contributed greatly to our basic understanding of the fundamental processes of life as well as to the treatment of genetic and infectious diseases.

Of particular significance in molecular genetics has been the development of techniques that permit the isolation, through cloning, of the genes responsible for specific traits, and the detailed analysis of their regulation, interactions, and products. Molecular techniques have increased our ability to diagnose and understand viral and bacterial disease, and the complex microbe/host interactions that are involved. The impact of these and other technological advances extend to such diverse fields as plant and animal developmental biology, virology, immunology, cancer biology, and biotechnology. Studies at a molecular level are essential to understanding the consequences to life when fundamental processes are altered by mutation, by infection, or by the environment.

The Molecular Genetics and Microbiology program is a research-intensive program and is designed to provide a strong background in science that is applicable to a variety of careers. Career opportunities for graduates include employment in research institutes, universities and other educational institutions, and industry. The program provides an excellent preparation for post-graduate research and professional programs.

The Molecular Genetics and Microbiology program consists of two streams, called Genetics and Microbiology. Students enter the program at the start of their second year, and choose a stream by the start of the third year. Each stream provides focused training, but there is considerable overlap between the programs, reflective of both the cross-disciplinary requirements of these two rapidly evolving disciplines and the impact of each on areas spanning modern biomedical science.

#### Estimated Enrolment: 45

## B Deleted Programs

### 1.0 Italian: Minor Programs (BA)

- i) Italian Cultural Studies
- ii) Italian Canadian Studies
- iii) Italian Cinema Studies
- iv) Italian and the Arts
- v) Italian Communication Studies
- vi) Italian Language and Linguistics
- vii) Italian Translating and Interpreting
- viii) Italian Literary Studies
- ix) Twentieth Century Literature and Culture
- x) The Italian Language and Nationhood

Rationale for deletion: The new Minor program (Italian Culture and Communication Studies) replaces this series of Minor Programs in Italian which have been undersubscribed (as above) in recent years and for which it has become increasingly difficult to offer the required courses for completion on a regular basis. The new Minor (Italian Culture and Communication Studies) will still offer students the possibility of completing a Minor Program in Italian in an area other than literature.

## 2.0 New College: Minor Program in Humanism (BA)

Rationale for deletion: Following up on recommendation in "Raising Our Sights".

# 3.0 Economics: Economic History Specialist Program (BA)

Rationale for deletion: The Department of Economics can no longer offer a wide enough range of courses in Economic History to sustain a Specialist Program in that discipline.

# 4.0 Botany: Plant Physiology and Metabolism Specialist (B.Sc.)

Rationale for deletion: Extremely low enrolment (1 student)

## 5.0 Physiology: Physiology (Theoretical) (B.Sc.)

Rationale for deletion: No students have been admitted to this program in the last 3 years, since the inception of the BIOPHYSICS and the NEUROSCIENCE programs. The students who used to choose the PSL Theoretical program are now opting for the newer programs instead.

# 6.0 Molecular Genetics and Molecular Biology Specialist (B.Sc.)

Rationale for deletion: see above: New Programs 1.0 Molecular Genetics and Microbiology Specialist Program

## 7.0 Microbiology Specialist (B.Sc.)

Rationale for deletion: see above: New Programs 1.0 Molecular Genetics and Microbiology Specialist Program

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#### C. Notes:

New program proposals for a Major and a Minor in East Asian Religion will come forward to the January meeting of the Committee on Standards.

A proposal to delete the Specialist program in Nutritional Science in favour of new program proposals for a Major and a Minor in Nutritional Science will come forward to the January meeting of the Committee on Standards.