

## New Program/Major or Minor/Concentration Proposal Form

(07/2004

		(07/2004)	
1.0 Degree Title Please specify the two degrees for conc		tering Faculty/Unit	
programs B. Sc.	Science		
D. 30.			
1.1 Major (Legacy= Subject)(30-char. max.)	Offering	Offering Faculty/Department	
Major in Pharmacology	Medicine/F	Medicine/Pharmacology & Therapeutics	
1.2 Concentration (Legacy = Concentration/ If applicable to Majors only (30 char. ma		e Term of Implementation ot. 2004 = 200409)	
1.3 Minor (with Concentration, if Applicable)	(30 char. max.)		
4.0 Pationals for now proposal			
4.0 Rationale for new proposal		d dissiplines conving as an evaluator properties for	
		d disciplines, serving as an excellent preparation for including medicine, dentistry, and veterinary sciences.	
5.0 Program Information			
Please check appropriate box(es)	0.0-1	5.0	
	5.2 Category	5.3 Level	
<del>-</del>	☐ Faculty Program (FP)	☑ Undergraduate	
	Major	☐ Dentistry/Law/Medicine	
	☐ Joint Major ☐ Major Concentration (CON)	<ul><li>☐ Continuing Ed (Non-Credit)</li><li>☐ Collegial</li></ul>	
	☐ Major Concentration (CON) ☐ Minor	_	
	☐ Minor Concentration (CON)	<ul><li>☐ Masters &amp; Grad Dips &amp; Certs</li><li>☐ Doctorate</li></ul>	
•	☐ Honours (HON)	<b>–</b>	
	☐ Joint Honours Component (HC)	☐ Post-Graduate Medicine/Dentistry	
<ul><li>☐ Graduate Diploma</li><li>☐ Ph.D. Program</li></ul>	☐ Internship/Co-op	☐ Graduate Qualifying ☐ Postdoctoral Fellows	
☐ Doctorate Program	□ Internatilp/Co-op	☐ FOSIGOCIOTAL FEILOWS	
Doctorate Frogram	☐ Thocic (T)		
<del>-</del>	☐ Thesis (T)		
(Other than Ph.D.)	☐ Non-Thesis (N)		
(Other than Ph.D.)  ☐ Private Program	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program	☐ Non-Thesis (N)		
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program ☐ Distance Education Program	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program ☐ Distance Education Program (By Correspondence)	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program ☐ Distance Education Program	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program ☐ Distance Education Program (By Correspondence)	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  Private Program  Off-Campus Program  Distance Education Program  (By Correspondence)  Other (Please specify)	☐ Non-Thesis (N) ☐ Other Please specify	on with	
(Other than Ph.D.)  ☐ Private Program ☐ Off-Campus Program ☐ Distance Education Program (By Correspondence)	☐ Non-Thesis (N) ☐ Other		
(Other than Ph.D.)  Private Program  Off-Campus Program  Distance Education Program  (By Correspondence)  Other (Please specify)	□ Non-Thesis (N) □ Other Please specify  7.0 Consultation Related United States (N)	nits Yes <b>x</b> No □	
(Other than Ph.D.)  Private Program  Off-Campus Program  Distance Education Program (By Correspondence)  Other (Please specify)  6.0 Total Credits	□ Non-Thesis (N) □ Other Please specify  7.0 Consultation Related Un Financial C	nits Yes <b>x</b> No □	

## 8.0 Program Description (Maximum 150 words)

The Major Program incorporates extensive studies in Pharmacology together with a strong component of related biomedical sciences, providing a solid preparation for employment opportunities or for entry into graduate or professional training programs. Students must consult an advisor upon entering the program and at the beginning of U2, to verify course selection and progress. Additional consultation at regular intervals is encouraged.

9.0 List of proposed program for the New Program/Major or Minor/Concentration.

If new concentration (option) of existing Major/Minor (program), please attach a program layout (list of all courses) of existing Major/Minor.

Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight under the headings of: Required Courses, Complementary Courses, Elective Courses)

U1 Required Courses (19 credits):

BIOL 200 (3) Molecular Biology

CHEM 212\* (4) Introductory Organic Chemistry 1

CHEM 222 (4) Introductory Organic Chemistry 2

PHGY 209 (3) Mammalian Physiology 1

PHGY 210 (3) Mammalian Physiology 2

PHGY 212 (1) Introductory Physiology Laboratory 1

PHGY 213 (1) Introductory Physiology Laboratory 2

U2 Required Courses (19 credits):

BIOC 311 (3) Metabolic Biochemistry

BIOL 202 (3) Basic Genetics

BIOL 301 (4) Cell and Molecular Laboratory

PHAR 300 (3) Drug Action

PHAR 301 (3) Drugs and Disease

PHAR 303 (3) Principles of Toxicology

U3 Required Courses (12 credits):

PHAR 503 (3) Drug Design and Development 1

PHAR 562 (3) Advanced Pharmacology 1

PHAR 563 (3) Advanced Pharmacology 2

PHAR 558 (3) Pharmacology Research Topics

\*Students with prior credit for CHEM 212 may take an elective in place of this course.

See next page for Complementary courses

10.0 Approvals				
Routing Sequence	Name	Signature	Date	
Department	Dr. Hans Zingg		November 22, 2006	
Curric/Acad Committee				
Faculty 1				
Faculty 2				
Faculty 3				
SCTP				
GS				
APPC				
Senate				
Submitted by				
Name	Tina Tremblav	To be completed by ARR:		
Phone	398-3623	CIP Code		
Email	Christina.tremblav@mcaill.ca			
Submission Date	November 22. 2006			

## **Complementary Courses**

(15 credits)

3 credits selected from:

BIOL 201 (3) Cell Biology and Metabolism

BIOC 212 (3) Molecular Mechanisms of Cell Function

3 credits selected from:

CHEM 204 (3) Physical Chemistry/Biological Sciences 1

CHEM 203 (3) Survey of Physical Chemistry

3 credits selected from:

BIOL 373 (3) Biometry

MATH 203 (3) Principles of Statistics 1

PSYC 204 (3) Introduction to Psychological Statistics

6 credits selected from the following upper level science courses:

ANAT 321 (3) Circuitry of the Human Brain

ANAT 365 (3) Cell Biology: Secretory Processes

ANAT 458 (3) Membranes and Cellular Signaling

/ BIOC 458

BIOC 450 (3) Protein Structure and Function

BIOC 454 (3) Nucleic Acids

BIOC 455 (3) Neurochemistry

BIOL 300 (3) Molecular Biology of the Gene

BIOL 303 (3) Developmental Biology

BIOL 306 (3) Neurobiology and Behaviour

BIOL 314 (3) Molecular Biology of Oncogenes

BIOT 505 (3) Selected Topics in Biotechnology

CHEM 302 (3) Introductory Organic Chemistry 3

CHEM 502 (3) Advanced Bio-Organic Chemistry

CHEM 504\* (3) Drug Design and Development 2

EXMD 504 (3) Biology of Cancer

EXMD 511 (3) Joint Venturing With Industry

MIMM 314 (3) Immunology

MIMM 387 (3) Applied Microbiology and Immunology

MIMM 414 (3) Advanced Immunology

NEUR 310 (3) Cellular Neurobiology

PATH 300 (3) Human Disease

PHAR 504\* (3) Drug Design and Development 2

PHAR 599D1/D2 (6) Research Projects in Pharmacology

PHGY 311 (3) Intermediate Physiology 1

PHGY 312 (3) Intermediate Physiology 2

PHGY 313 (3) Intermediate Physiology 3

PHGY 314 (3) Integrative Neuroscience

PHGY 520 (3) Ion Channels

PSYC 311 (3) Human Cognition and the Brain

Committee approval is required to substitute an upper level science course not in the above list.

<sup>\*</sup>Students may take either CHEM 504 or PHAR 504