McGill

New Program/Major or Minor/Concentration Proposal Form

(2013)

1.0 Degree Title
Please specify the two degrees for concurrent degree programs

PhD

2.0 Administering Faculty/Unit

Graduate and Postdoctoral Studies

1.1 Major (Legacy= Subject)(30-char. max.)

Pharmacology

Offering Faculty/Department

Medicine/Pharmacology and Therapeutics

1.2 Concentration (Legacy = Concentration/Option)
If applicable to Majors only (30 char. max.)

Environmental Health Sciences

3.0 Effective Term of Implementation
(Ex. Sept. 2004 = 200409)
Term

201709

1.3 Minor (with Concentration, if Applicable) (30 char. max.)

4.0 Rationale and Admission Requirements for New Proposal

The investigation of key questions in Environmental Health Sciences requires an interdisciplinary, collaborative approach. This new graduate option will use capstone courses to bring together graduate students from participating units (i.e., Epidemiology, Biostatistics and Occupational Health; Pharmacology and Therapeutics; Natural Resource Sciences; Experimental Medicine), exposing them to diverse approaches and research issues. Admission Requirements (see signature page).

5.0 Program Information
Please check appropriate box(es)

5.1 Program Type

- Bachelor's Program
- Master's
- M.Sc. (Applied) Program
- Dual Degree/Concurrent Program
- Certificate
- Diploma
- Graduate Certificate
- Graduate Diploma
- [x] Ph.D. Program
- Doctorate Program (Other than Ph.D.)
- Private Program
- Off-Campus Program
- Distance Education Program (By Correspondence)
- Other (Please specify)

5.2 Category

- Faculty Program (FP)
- Major
- Joint Major
- Major Concentration (CON)
- Minor
- Minor Concentration (CON)
- Honours (HON)
- Joint Honours Component (HC)
- Internship/Co-op
- x Thesis (T)
- Non-Thesis (N)
- Other
- Please specify

5.3 Level

- Undergraduate
- Dentistry/Law/Medicine
- Continuing Studies (Non-Credit)
- Collegial
- Masters & Grad Dips & Certs
- x Doctorate
- Post-Graduate Medicine/Dentistry
- Graduate Qualifying
- Postdoctoral Fellows

5.4 FQRSC (Research) Indicator (for GPS) Yes No

6.0 Total Credits

0

7.0 Consultation with Related Units Yes [x] No

Financial Consult Yes No X

Attach list of consultations.

8.0 Program Description (Maximum 150 words)

The Environmental Health Sciences Option to the PhD program in Pharmacology is designed to train professionals for advanced basic research, teaching, and leadership positions in environmental health sciences. The Option will add a distinct focus on the interplay between the environment and health research. Students will acquire a broad environmental perspective, including exposure sciences, hazard screening methodologies, epidemiological approaches, health implications of environmental quality, and policy approaches. Students must complete the specified course requirements for the PhD program and a PhD thesis.

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)

Existing Program:

PhD Pharmacology:

Thesis

- A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain.

Required Courses (12 credits) PHAR 609: Research Professionalism for Pharmacologists (1 credit)

- PHAR 610: Scientific Communication for Pharmacologists (2 credits)
- PHAR 701 D1 Comprehensive Exam (0 credit)
- PHAR 701 D2 Comprehensive Exam (0 credit)
- PHAR 712: Statistics for Pharmacologists (3 credits)

Two additional 700-level PHAR courses (3 credits each), or the equivalent, upon approval by the Graduate Training Committee (GTC).

Complementary Courses (6 credits)

6 credits, chosen from the following courses:

- PHAR 503 Drug Design & Development 1 (3 credits)

OR

- PHAR 505 Structural Pharmacology (3 credits)
- PHAR 562 Neuropharmacology (3 credits)
- PHAR 563 Endocrine Pharmacology (3 credits)

OR completion of an equivalency exam
OR an exemption granted by the GTC on the basis of previous courses

Proposed new Option:

PhD Pharmacology (Environmental Health Sciences Option)

Thesis

- A thesis for the doctoral degree must constitute original scholarship and must be a distinct contribution to knowledge. It must show familiarity with previous work in the field and must demonstrate ability to plan and carry out research, organize results, and defend the approach and conclusions in a scholarly manner. The research presented must meet current standards of the discipline; as well, the thesis must clearly demonstrate how the research advances knowledge in the field. Finally, the thesis must be written in compliance with norms for academic and scholarly expression and for publication in the public domain. Required Courses (15 credits) PHAR 609: Research Professionalism for Pharmacologists (1 credit)
- PHAR 610: Scientific Communication for Pharmacologists (2 credits)
- PHAR 701 D1 Comprehensive Exam (0 credit)
- PHAR 701 D2 Comprehensive Exam (0 credit)PHAR 712: Statistics for Pharmacologists (3 credits)
- PHAR 670 Principles of Environmental Health Sciences 1 (3 credits)
- PHAR 671 Principles of Environmental Health Sciences 2 (3 credits)

One additional 700-level PHAR courses (3 credits each), or the equivalent, upon approval by the Graduate Training Committee (GTC).

Complementary Courses (3 credits)

3 credits, chosen from the following courses:

- PHAR 503 Drug Design & Development 1 (3 credits)
- PHAR 505 Structural Pharmacology (3 credits)
- PHAR 562 Neuropharmacology (3 credits)
- PHAR 563 Endocrine Pharmacology (3 credits)

OR completion of an equivalency exam
OR an exemption granted by the GTC on the basis of previous courses

Attach extra page(s) as needed

10.0 Approvals

Routing Sequence	Name	Signature	Date
Department	Gerhard Multhaup, Dr. rer. nat.		FEB 13 2017
Curric/Acad Committee	DAVID RAGSDALE (CHAIR)		Feb. 20, 2017
Faculty 1	ELAINE DAVIS (Asst Dean)		Feb. 24. 2017
Faculty 2			
Faculty 3			
CGPS			
SCTP			
APC			
Senate			

Submitted by

Name	
Phone	
Email	
Submission Date	

To be completed by ARR:

CIP Code

Admission Requirements:
Candidates are required to hold a M.Sc. degree in a discipline relevant to the proposed field of study; those with the M.D., D.D.S., or D.V.M. degrees are also eligible to apply. A background in the health sciences is recommended, but programs in biology, chemistry, mathematics, and physical sciences may be acceptable. Admission is based on a student's academic record, letters of assessment, and, whenever possible, interviews with staff members. Students are required to take the Graduate Record Examination Aptitude Test (xref: GRE) and the Test of English as a Foreign Language (xref: TOEFL) or the equivalent, except as follows: in accordance with McGill policy, only those whose mother tongue is English, who graduated from a recognized Canadian institution (anglophone or francophone), or who completed an undergraduate or graduate degree at a recognized foreign institution where English is the language of instruction are exempt from providing proof of competency in English.