McGill

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title
Specify the two degrees for concurrent degree programs

Bachelor of Science (B.Sc.)

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

Honours Pharmacology

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

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

1.4 Category

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

1.5 Complete Program Title

Bachelor of Science (B.Sc.) - Honours Pharmacology

2.0 Administering Faculty/Unit

Faculty of Science

Offering Faculty/Department

Faculty of Medicine / Dept. of Pharmacology & Therapeutics

3.0 Effective Term of revision or retirement
Please give reasons in 5.0 "Rationale" in the case of retirement
(Ex. Sept. 2004 = 200409) Retirement

Term: 201409

4.0 Existing Credit Weight: 74 credits

Proposed Credit Weight: 74 credits

5.0 Rationale for revised program

PHAR 598D1/D2 is being created as a research course specifically for Honours students. PHAR 599D1/D2 will remain a Complementary course for students in the Pharmacology Minor and Major programs.

6.0 Revised Program Description (Maximum 150 words)

n/a

7.0 List of existing program and proposed program

Existing 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 (22 credits)
* Students with prior credit for CHEM 212 may take an elective in place of this course.

- BIOL 200 Molecular Biology (3 credits)
- BIOL 202 Basic Genetics (3 credits)
- CHEM 212 Introductory Organic Chemistry 1 (4 credits) *
- CHEM 222 Introductory Organic Chemistry 2 (4 credits)
- PHGY 209 Mammalian Physiology 1 (3 credits)
- PHGY 210 Mammalian Physiology 2 (3 credits)
- PHGY 212 Introductory Physiology Laboratory 1 (1 credit)
- PHGY 213 Introductory Physiology Laboratory 2 (1 credit)

U2 Required Courses (16 credits)

- BIOC 311 Metabolic Biochemistry (3 credits)
- BIOL 301 Cell and Molecular Laboratory (4 credits)
- PHAR 300 Drug Action (3 credits)
- PHAR 301 Drugs and Disease (3 credits)
- PHAR 303 Principles of Toxicology (3 credits)

U3 Required Courses (18 credits)
* ~~PHAR 599D1 and PHAR 599D2~~ are taken together.

- PHAR 503 Drug Discovery and Development 1 (3 credits)
- PHAR 558 Pharmacology Selected Topics (3 credits)
- PHAR 562 General Pharmacology 1 (3 credits)
- PHAR 563 General Pharmacology 2 (3 credits)
- ~~PHAR 599D1 Pharmacology Research Project (3 credits) *~~
- ~~PHAR 599D2 Pharmacology Research Project (3~~ credits) *

Complementary Courses (18 credits)
18 credits selected as follows:

3 credits selected from (usually in Year 1):

- ANAT 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOC 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits)

3 credits selected from (usually in Year 2):

- CHEM 203 Survey of Physical Chemistry (3 credits)
- CHEM 204 Physical Chemistry/Biological Sciences 1 (3 credits)

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 (22 credits)
* Students with prior credit for CHEM 212 may take an elective in place of this course.

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- BIOL 301 Cell and Molecular Laboratory (4 credits)
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U3 Required Courses (18 credits)

- PHAR 503 Drug Discovery and Development 1 (3 credits)
- PHAR 558 Pharmacology Selected Topics (3 credits)
- PHAR 562 General Pharmacology 1 (3 credits)
- PHAR 563 General Pharmacology 2 (3 credits)
- **PHAR 598D1 Honours Pharmacology Research Project (3 credits)**
- **PHAR 598D2 Honours Pharmacology Research Project (3 credits)**

Complementary Courses (18 credits)
18 credits selected as follows:

3 credits selected from (usually in Year 1):

- ANAT 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOC 212 Molecular Mechanisms of Cell Function (3 credits)
- BIOL 201 Cell Biology and Metabolism (3 credits)

3 credits selected from (usually in Year 2):

- CHEM 203 Survey of Physical Chemistry (3 credits)
- CHEM 204 Physical Chemistry/Biological Sciences 1 (3 credits)

3 credits selected from (usually in Year 2):

- BIOL 373 Biometry (3 credits)
- MATH 203 Principles of Statistics 1 (3 credits)
- PSYC 204 Introduction to Psychological Statistics (3 credits)

9 credits selected from the following upper-level science courses:

Committee approval is required to substitute an upper-level science course not in the list below.
* Note: Students may take either ANAT 458 or BIOC 458.

- ANAT 321 Circuitry of the Human Brain (3 credits)
- ANAT 322 Neuroendocrinology (3 credits)
- ANAT 365 Cellular Trafficking (3 credits)
- ANAT 458 Membranes and Cellular Signaling (3 credits) *
- BIOC 312 Biochemistry of Macromolecules (3 credits)
- BIOC 450 Protein Structure and Function (3 credits)
- BIOC 454 Nucleic Acids (3 credits)
- BIOC 458 Membranes and Cellular Signaling (3 credits) *
- BIOL 300 Molecular Biology of the Gene (3 credits)
- BIOL 303 Developmental Biology (3 credits)
- BIOL 306 Neural Basis of Behaviour (3 credits)
- BIOL 314 Molecular Biology of Oncogenes (3 credits)
- BIOT 505 Selected Topics in Biotechnology (3 credits)
- CHEM 302 Introductory Organic Chemistry 3 (3 credits)
- CHEM 334 Advanced Materials (3 credits)
- CHEM 382 Organic Chemistry: Natural Products (3 credits)
- CHEM 502 Advanced Bio-Organic Chemistry (3 credits)
- CHEM 503 Drug Design and Development 1 (3 credits)
- CHEM 504 Drug Design and Development 2 (3 credits)
- CHEM 522 Stereochemistry (3 credits)
- CHEM 552 Physical Organic Chemistry (3 credits)
- EPIB 501 Population Health and Epidemiology (3 credits)
- EXMD 401 Physiology and Biochemistry Endocrine Systems (3 credits)
- EXMD 504 Biology of Cancer (3 credits)
- EXMD 511 Joint Venturing with Industry (3 credits)
- MIMM 387 The Business of Science (3 credits)
- MIMM 414 Advanced Immunology (3 credits)
- NEUR 310 Cellular Neurobiology (3 credits)
- PATH 300 Human Disease (3 credits)
- PHAR 504 Drug Discovery and Development 2 (3 credits)
- PHGY 311 Channels, Synapses & Hormones (3 credits)
- PHGY 312 Respiratory, Renal, & Cardiovascular Physiology (3 credits)
- PHGY 313 Blood, Gastrointestinal, & Immune Systems Physiology (3 credits)
- PHGY 314 Integrative Neuroscience (3 credits)
- PHGY 520 Ion Channels (3 credits)
- PSYC 302 The Psychology of Pain (3 credits)
- PSYC 311 Human Cognition and the Brain (3 credits)
- PSYT 301 Issues in Drug Dependence (3 credits)
- PSYT 455 Neurochemistry (3 credits)
- PSYT 500 Advances: Neurobiology of Mental Disorders (3 credits)
- REDM 410 Writing Research Articles (3 credits)

3 credits selected from (usually in Year 2):

- BIOL 373 Biometry (3 credits)
- MATH 203 Principles of Statistics 1 (3 credits)
- PSYC 204 Introduction to Psychological Statistics (3 credits)

9 credits selected from the following upper-level science courses:

Committee approval is required to substitute an upper-level science course not in the list below.
* Note: Students may take either ANAT 458 or BIOC 458.

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- PSYT 500 Advances: Neurobiology of Mental Disorders (3 credits)
- REDM 410 Writing Research Articles (3 credits)

8.0 Consultation with Related Units ❑ Yes ☒ No Financial Consult ❑ Yes ☒ No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	Dr. Gerhard Multhaup		
Curric/Acad Committee	Dr. Barbara Hales		
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

Submitted by

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Submission Date:

To be completed by ARR:

CIP Code: