



1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit <input type="text" value="Science"/>																
1.1 <input type="text" value="B.Sc."/>	Offering Faculty/Department <input type="text" value="Medicine/Biochemistry"/>																
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.) <input type="text" value="Biochemistry"/>	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: <input type="text" value="Sept. 2010"/>																
1.3 Minor (with Concentration, if applicable) (30 char. max.)	4.0 Existing Credit Weight Proposed Credit Weight <input type="text" value="66 or 69 credits"/> <input type="text" value="67 credits"/>																
1.4 Category <table border="0"> <tr> <td>Faculty Program (FP)</td> <td>Honours (HON)</td> </tr> <tr> <td>Major</td> <td>Joint Honours</td> </tr> <tr> <td>Joint Major</td> <td>Component (HC)</td> </tr> <tr> <td>Major Concentration (CON)</td> <td>Internship/Co-op</td> </tr> <tr> <td>Minor</td> <td>Thesis (T)</td> </tr> <tr> <td>Minor Concentration (CON)</td> <td>Non-Thesis (N)</td> </tr> <tr> <td></td> <td>Other</td> </tr> <tr> <td></td> <td>Please specify</td> </tr> </table> <input type="text"/>	Faculty Program (FP)	Honours (HON)	Major	Joint Honours	Joint Major	Component (HC)	Major Concentration (CON)	Internship/Co-op	Minor	Thesis (T)	Minor Concentration (CON)	Non-Thesis (N)		Other		Please specify	5.0 Rationale for revised program <p>As requested by the Faculty of Science, we are adding CHEM 212 (Organic Chemistry 1) as a requirement in our Majors and Honours programs. In order to avoid increasing substantially the overall number of credits for required and Complementary courses, we are eliminating 3 credits of Complementary course credits in U2. We are also moving one set of Complementary courses (3 credits) from U1 to U2 to accommodate the addition of CHEM 212 to U1.</p> <p>As further housekeeping changes, we are (a) removing BIOC 460 (which is no longer offered) from these programs and (b) removing from the U3 Complementary course list a few courses that students will not be able to take (along with their required prerequisites) within the now-reduced total of Complementary course credits.</p> <p style="text-align: center;"><input type="checkbox"/></p>
Faculty Program (FP)	Honours (HON)																
Major	Joint Honours																
Joint Major	Component (HC)																
Major Concentration (CON)	Internship/Co-op																
Minor	Thesis (T)																
Minor Concentration (CON)	Non-Thesis (N)																
	Other																
	Please specify																
1.5 <input type="text" value="B.Sc. (Major) in Biochemistry"/>																	

6.0 Revised Program Description (Maximum 150 words)

<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
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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)

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

CURRENT MAJOR PROGRAM (66 or 69 CREDITS)

Students may transfer into the Major program at any time provided they have met all course requirements.

U1 Year (28 credits)

U1 Required Courses (19 credits)

BIOC 212	Molecular Mechanism of Cell Function	3
BIOL 200	Molecular Biology	3
BIOL 202	Basic Genetics	3
CHEM 204	Physical Chem./Biological Sc. 1	3
CHEM 222	Intro. Organic Chemistry 2	4
CHEM 287	Intro Analytical Chemistry	2
CHEM 297	Intro Analytical Chemistry Lab	1

*Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see www.mcgill.ca/student-records/transferecredits for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.

U1 Complementary Courses (9 credits)

6 credits selected from:

BIOL 205	Biology of Organisms	3
MIMM 211	Introductory Microbiology	3
PHGY 209	Mammalian Physiology 1	3
PHGY 210	Mammalian Physiology 2	3

3 Credits selected from:

BIOL 309	Math. Models in Biology	3
BIOL 373	Biometry	3
COMP 202	Introduction to Computing 1	3
MATH 203	Principles of Statistics 1	3
MATH 222	Calculus 3	3
PSYC 204	Intro. To Psychological Stats.	3

U2 Year (26 credits)

U2 Required Courses (23 credits)

ANAT 262	Intro. Molecular & Cell Biology	3
BIOC 300D1	Laboratory in Biochemistry	3
BIOC 300D2	Laboratory in Biochemistry	3
BIOC 311	Metabolic Biochemistry	3
BIOC 312	Biochemistry of Macromolecules	3
CHEM 214	Physical Chem./Biological Sc. 2	3
CHEM 302	Intro. Organic Chemistry 3	3
CHEM 362	Advanced Organic Chem. Lab	2

U2 Complementary Courses (3 credits)

3 credits selected from:

BIOL 303	Developmental Biology	3
BIOL 313	Eukaryotic Cell Biology	3
CHEM 352	Structural Organic Chemistry	3
CHEM 382	Organic Chem. Natural Products	3
MIMM 314	Immunology	3

U3 Year (12 or 15 credits)

U3 Required Courses (6 credits)

BIOC 450	Protein Structure & Function	3
BIOC 454	Nucleic Acids	3

U3 Complementary Courses (6 or 9 credits)

At least 3 credits selected from:

BIOC 404	Biophysical Chemistry	3
BIOC 455	Neurochemistry	3
BIOC 458	Membranes & Cellular Signaling	3
BIOC 460	Advanced Biochemistry Lab (Special Permission)*	6
BIOC 503	Immunochimistry	3

The remainder, if any, to be selected from the following list:

BIOL 300	Molecular Biol. of the Gene	3
BIOL 303	Developmental Biology	3
BIOL 304	Evolution	3
BIOL 313	Eukaryotic Cell Biology	3
BIOL 314	Molecular Biology of Oncogenes	3
CHEM 352	Structural Organic Chemistry	3
CHEM 382	Organic Chem.: Nat. Products	3
CHEM 502	Advanced Bio-organic Chemistry	3
CHEM 552	Physical Organic Chemistry	3
CHEM 572	Synthetic Organic Chemistry	3
EXMD 502	Advanced Endocrinology 01	3
EXMD 503	Advanced Endocrinology 02	3
MIMM 314	Immunology	3
MIMM 324	Fundamental Virology	3
PHAR 300	Drug Action	3
PHAR 301	Drugs and Disease	3
PHGY 311	Channels, Synapses & Hormones	3
PHGY 312	Respiratory, Renal & Cardiovascular Physiology	3

* Limited enrollment: Honours students, others with permission. Students who are given special permission to register for BIOC 460 are required to complete 9 credits of Complementary Courses in U3 (i.e., BIOC 460 plus one other 3 credit complementary course).

REVISED MAJOR PROGRAM (67 CREDITS)

Students may transfer into the Major program at any time provided they have met all course requirements.

U1 Year (29 credits)

U1 Required Courses (23 credits)

BIOC 212	Molecular Mechanism of Cell Function	3
BIOL 200	Molecular Biology	3
BIOL 202	Basic Genetics	3
CHEM 204	Physical Chem./Biological Sc. 1	3
CHEM 212	Intro. Organic Chemistry 1	4*
CHEM 222	Intro. Organic Chemistry 2	4*
CHEM 287	Intro Analytical Chemistry	2
CHEM 297	Intro Analytical Chemistry Lab	1

*Students with CEGEP-level credit for the equivalents of CHEM 212 and/or CHEM 222 (see www.mcgill.ca/student-records/transferecredits for accepted equivalents) may not take these courses at McGill and should replace them with elective courses to satisfy the total credit requirement for their degree.

U1 Complementary Courses (6 credits)

6 credits selected from:

BIOL 205	Biology of Organisms	3
MIMM 211	Introductory Microbiology	3
PHGY 209	Mammalian Physiology 1	3
PHGY 210	Mammalian Physiology 2	3

U2 Year (26 credits)

U2 Required Courses (23 credits)

ANAT 262	Intro. Molecular & Cell Biology	3
BIOC 300D1	Laboratory in Biochemistry	3
BIOC 300D2	Laboratory in Biochemistry	3
BIOC 311	Metabolic Biochemistry	3
BIOC 312	Biochemistry of Macromolecules	3
CHEM 214	Physical Chem./Biological Sc. 2	3
CHEM 302	Intro. Organic Chemistry 3	3
CHEM 362	Advanced Organic Chem. Lab	2

U2 Complementary Courses (3 credits)

3 credits selected from:

BIOL 309	Math. Models in Biology	3
BIOL 373	Biometry	3
COMP 202	Introduction to Computing 1	3
MATH 203	Principles of Statistics 1	3
MATH 222	Calculus 3	3
PSYC 204	Intro. to Psychological Stats.	3

U3 Year (12 credits)

U3 Required Courses (6 credits)

BIOC 450	Protein Structure & Function	3
BIOC 454	Nucleic Acids	3

U3 Complementary Courses (6 credits)

At least 3 credits selected from:

BIOC 404	Biophysical Chemistry	3
BIOC 455	Neurochemistry	3
BIOC 458	Membranes & Cellular Signaling	3
BIOC 503	Immunochimistry	3

The remainder, if any, to be selected from the following list:

BIOL 300	Molecular Biol. of the Gene	3
BIOL 303	Developmental Biology	3
BIOL 304	Evolution	3
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CHEM 502	Advanced Bio-organic Chemistry	3
CHEM 552	Physical Organic Chemistry	3
CHEM 572	Synthetic Organic Chemistry	3
EXMD 502	Advanced Endocrinology 01	3
MIMM 314	Immunology	3
MIMM 324	Fundamental Virology	3
PHAR 300	Drug Action	3
PHGY 311	Channels, Synapses & Hormones	3

Attach extra page(s) as needed

8.0 Consultation with
Related Units

Yes No

Financial Consult Yes No

Attach list of consultations

9. Approvals

Routing Sequence	Name	Signature	Date
Department	<input type="text"/>	<input type="text"/>	<input type="text"/>
Curric/Acad Committee	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 1	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 2	<input type="text"/>	<input type="text"/>	<input type="text"/>
Faculty 3	<input type="text"/>	<input type="text"/>	<input type="text"/>
SCTP	<input type="text"/>	<input type="text"/>	<input type="text"/>
GS	<input type="text"/>	<input type="text"/>	<input type="text"/>
APPC	<input type="text"/>	<input type="text"/>	<input type="text"/>
Senate	<input type="text"/>	<input type="text"/>	<input type="text"/>

Submitted by

Name
Phone
Email
Submission Date

To be completed by ARR:

CIP Code