



<p>1.0 Degree Title Specify the two degrees for concurrent degree programs</p> <p>1.1 <input style="width: 100%;" type="text" value="B.Sc. Major in Microbiology & Immunology"/></p> <p>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.) <input style="width: 100%; height: 20px;" type="text"/> <input style="width: 100%; height: 20px;" type="text"/></p> <p>1.3 Minor (with Concentration, if applicable) (30 char. max.)</p> <p>1.4 Category</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: none;">Faculty Program (FP)</td> <td style="width: 50%; border: none;">Honours (HON)</td> </tr> <tr> <td style="border: none;">Major X</td> <td style="border: none;">Joint Honours</td> </tr> <tr> <td style="border: none;">Joint Major</td> <td style="border: none;">Component (HC)</td> </tr> <tr> <td style="border: none;">Major Concentration (CON)</td> <td style="border: none;">Internship/Co-op</td> </tr> <tr> <td style="border: none;">Minor</td> <td style="border: none;">Thesis (T)</td> </tr> <tr> <td style="border: none;">Minor Concentration (CON)</td> <td style="border: none;">Non-Thesis (N)</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Other</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Please specify</td> </tr> </table> <p style="text-align: right;"><input style="width: 150px; height: 20px;" type="text"/></p> <p>1.5 <input style="width: 100%;" type="text" value="BSc Major in Microbiology & Immunology"/></p>	Faculty Program (FP)	Honours (HON)	Major X	Joint Honours	Joint Major	Component (HC)	Major Concentration (CON)	Internship/Co-op	Minor	Thesis (T)	Minor Concentration (CON)	Non-Thesis (N)		Other		Please specify	<p>2.0 Administering Faculty/Unit <input style="width: 100%;" type="text" value="Science/Microbiology & Immunology"/></p> <p>Offering Faculty/Department <input style="width: 100%;" type="text" value="Medicine/Microbiology & Immunology"/></p> <p>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</p> <p>Term: <input style="width: 150px;" type="text" value="201209"/></p> <p>4.0 Existing Credit Weight Proposed Credit Weight</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; border: 1px solid black; text-align: center;">67</td> <td style="width: 50%; border: 1px solid black; text-align: center;">67</td> </tr> </table> <p>5.0 Rationale for revised program</p> <div style="border: 1px solid black; padding: 10px; min-height: 150px;"> <p>A new required U1 course, MMM 214, Introduction to Immunology: Elements of Immunity, has been introduced. The requirement for CHEM 203/204 has been removed, and these courses will be added to the Complementary Course list.</p> <p style="text-align: right;"><input type="checkbox"/></p> </div>	67	67
Faculty Program (FP)	Honours (HON)																		
Major X	Joint Honours																		
Joint Major	Component (HC)																		
Major Concentration (CON)	Internship/Co-op																		
Minor	Thesis (T)																		
Minor Concentration (CON)	Non-Thesis (N)																		
	Other																		
	Please specify																		
67	67																		
<p>6.0 Revised Program Description (Maximum 150 words)</p> <div style="border: 1px solid black; padding: 10px; min-height: 250px;"> <table style="width: 100%; border: none;"> <tr><td style="width: 20px; border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> <tr><td style="border: none;"><input type="checkbox"/></td><td style="border: none;"></td></tr> </table> </div>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>					
<input type="checkbox"/>																			
<input type="checkbox"/>																			
<input type="checkbox"/>																			
<input type="checkbox"/>																			
<input type="checkbox"/>																			
<input type="checkbox"/>																			
<input type="checkbox"/>																			

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)

Major Microbiology and Immunology (67 credits)

U1 Required Courses (25 credits)

* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).

** Students who have taken CHEM 222 in CEGEP are exempt and must replace these credits with an elective course(s).

BIOL 200 (3) Molecular Biology
BIOL 202 (3) Basic Genetics
CHEM 212* (4) Introductory Organic Chemistry 1
CHEM 222** (4) Introductory Organic Chemistry 2
MIMM 211 (3) Introductory Microbiology
MIMM 212 (2) Laboratory in Microbiology

One of:

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

One of:

~~CHEM 203 (3) Survey of Physical Chemistry~~
~~CHEM 204 (3) Physical Chemistry/Biological Sciences I~~

U1, U2 or U3 Required Course (3 credits)

One of:

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

U2 Required Courses (21 credits)

BIOC 311 (3) Metabolic Biochemistry
BIOC 312 (3) Biochemistry of Macromolecules
MIMM 314 (3) Immunology
MIMM 323 (3) Microbial Physiology
MIMM 324 (3) Fundamental Virology
MIMM 386D1 (3) Laboratory in Microbiology and Immunology
MIMM 386D2 (3) Laboratory in Microbiology and Immunology

U3 Required Courses (9 credits)

MIMM 413 (3) Parasitology
MIMM 465 (3) Bacterial Pathogenesis
MIMM 466 (3) Viral Pathogenesis

Complementary Courses (9 credits)

9 credits selected from:

* Students may select either ANAT 458 or BIOC 458, but not both

ANAT 261 (4) Introduction to Dynamic Histology
ANAT 262 (3) Introductory Molecular and Cell Biology
ANAT 365 (3) Cellular Trafficking
ANAT 458* (3) Membranes and Cellular Signaling
BIOC 450 (3) Protein Structure and Function
BIOC 454 (3) Nucleic Acids
BIOC 458* (3) Membranes and Cellular Signaling
BIOL 300 (3) Molecular Biology of the Gene
BIOL 314 (3) Molecular Biology of Oncogenes
BIOT 505 (3) Selected Topics in Biotechnology
CHEM 302 (3) Introductory Organic Chemistry 3
EXMD 504 (3) Biology of Cancer
MIMM 387 (3) Applied Microbiology and Immunology
MIMM 414 (3) Advanced Immunology
MIMM 509 (3) Inflammatory Processes
PATH 300 (3) Human Disease
PHAR 300 (3) Drug Action
PHAR 301 (3) Drugs and Disease
PHGY 209 (3) Mammalian Physiology I

Attach extra page(s) as needed

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

Major Microbiology and Immunology (67 credits)

U1 Required Courses (25 credits)

* Students who have taken CHEM 212 in CEGEP are exempt and must replace these credits with an elective course(s).

** Students who have taken CHEM 222 in CEGEP are exempt and must replace these credits with an elective course(s).

BIOL 200 (3) Molecular Biology
BIOL 202 (3) Basic Genetics
CHEM 212* (4) Introductory Organic Chemistry 1
CHEM 222** (4) Introductory Organic Chemistry 2
MIMM 211 (3) Introductory Microbiology
MIMM 212 (2) Laboratory in Microbiology

MIMM 214 (3) Introduction to Immunology: Elements of Immunity

One of:

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

U1, U2 or U3 Required Course (3 credits)

One of:

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

U2 Required Courses (21 credits)

BIOC 311 (3) Metabolic Biochemistry
BIOC 312 (3) Biochemistry of Macromolecules
MIMM 314 (3) Immunology
MIMM 323 (3) Microbial Physiology
MIMM 324 (3) Fundamental Virology
MIMM 386D1 (3) Laboratory in Microbiology and Immunology
MIMM 386D2 (3) Laboratory in Microbiology and Immunology

U3 Required Courses (9 credits)

MIMM 413 (3) Parasitology
MIMM 465 (3) Bacterial Pathogenesis
MIMM 466 (3) Viral Pathogenesis

Complementary Courses (9 credits)

9 credits selected from:

* Students may select either ANAT 458 or BIOC 458, but not both

ANAT 261 (4) Introduction to Dynamic Histology
ANAT 262 (3) Introductory Molecular and Cell Biology
ANAT 365 (3) Cellular Trafficking
ANAT 458* (3) Membranes and Cellular Signaling
BIOC 450 (3) Protein Structure and Function
BIOC 454 (3) Nucleic Acids
BIOC 458* (3) Membranes and Cellular Signaling
BIOL 300 (3) Molecular Biology of the Gene
BIOL 314 (3) Molecular Biology of Oncogenes
BIOT 505 (3) Selected Topics in Biotechnology
CHEM 203 (3) Survey of Physical Chemistry
CHEM 204 (3) Physical Chemistry/Biological Sciences I
CHEM 302 (3) Introductory Organic Chemistry 3
EXMD 504 (3) Biology of Cancer
MIMM 387 (3) Applied Microbiology and Immunology
MIMM 414 (3) Advanced Immunology
MIMM 509 (3) Inflammatory Processes
PATH 300 (3) Human Disease
PHAR 300 (3) Drug Action
PHAR 301 (3) Drugs and Disease
PHGY 209 (3) Mammalian Physiology I

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