



<p><b>1.0 Degree Title</b> Specify the two degrees for concurrent degree programs</p> <p>B.Sc.</p> <p><b>1.1 Major (Legacy= Subject) (30-char. max.)</b></p> <p>Biochemistry</p> <p><b>1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)</b></p> <p></p> <p><b>1.3 Minor (with Concentration, if applicable) (30 char. max.)</b></p> <p></p> <p><b>1.4 Category</b></p> <p><input checked="" type="checkbox"/> Faculty Program (FP)      <input type="checkbox"/> Honours (HON)  <input type="checkbox"/> Major                                      <input type="checkbox"/> Joint Honours Component (HC)  <input type="checkbox"/> Joint Major                                      <input type="checkbox"/> Internship/Co-op Thesis (T)  <input type="checkbox"/> Major Concentration (CON)      <input type="checkbox"/> Non-Thesis (N)  <input type="checkbox"/> Minor    <input type="checkbox"/> Other  <input type="checkbox"/> Minor Concentration (CON)      Please specify</p> <p></p> <p><b>1.5 Complete Program Title</b></p> <p>B.Sc Faculty Program in Biochemistry</p>	<p><b>2.0 Administering Faculty/Unit</b></p> <p>Science</p> <p><b>Offering Faculty/Department</b></p> <p>Biochemistry</p> <p><b>3.0 Effective Term of revision or retirement</b> Please give reasons in 8.0 "Rationale" in the case of retirement (Ex. Sept. 2004 = 200409)</p> <p><b>Term</b></p> <p>Sept 2005</p> <p><b>4.0 Existing Credit Weight</b>      <b>Proposed Credit Weight</b></p> <p>55                                      55</p> <p><b>5.0 Description (Maximum 150 words)</b></p> <p>Math 203 is being added to the list of complementary courses in mathematics/statistics/**, 3 credits of which must be taken in the program.</p> <div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>RECEIVED</b> McGill University</p> <p>MAR 11 2005</p> <p>FACULTY OF MEDICINE ACADEMIC AFFAIRS</p> </div>
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<p><b>6.0 List of existing program and proposed program</b></p> <p><b>Existing program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)</b></p> <p><u>U1- 25 credits in total</u>  <u>Required Courses (16 credits)</u>          BIOL 200 Molecular Biology (3)          BIOG 212 Molec. Mechanisms of Cell Funct. (3)          BIOL 202 Basic Genetics (3)          CHEM 204 Physical Chem./Biol.Sci.1 (3)          CHEM 222 Intro Organic Chemistry 2 (4)</p> <p><u>Complementary Courses (9 credits)</u>          6 credits from :          MIMM 211 Introductory Microbiology (3)          BIOL 205 Biology of Organisms (3)          PHGY 209 Mammalian Physiology 1 (3)          PHGY 210 Mammalian Physiology 2 (3)</p>	<p><b>Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)</b></p> <p><u>U1- 25 credits in total</u>  <u>Required Courses (16 credits)</u>          BIOL 200 Molecular Biology (3)          BIOG 212 Molec. Mechanisms of Cell Funct. (3)          BIOL 202 Basic Genetics (3)          CHEM 204 Physical Chem./Biol.Sci.1 (3)          CHEM 222 Intro Organic Chemistry 2 (4)</p> <p><u>Complementary Courses (9 credits)</u>          6 credits from :          MIMM 211 Introductory Microbiology (3)          BIOL 205 Biology of Organisms (3)          PHGY 209 Mammalian Physiology 1 (3)          PHGY 210 Mammalian Physiology 2 (3)</p>
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6.0 (Continued) 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)

3 credits from :

BIOL 373 Biometry (3)  
COMP 202 Intro to Computing 1 (3)  
PSYC 204 Intro. to Psychological Stats (3)  
MATH 222 Calculus 3 (3)

U2- 18 Credits in total

Required Courses (15 credits)

BIOC 300 D1 Laboratory in Biochemistry (3)  
BIOC 300 D2 Laboratory in Biochemistry (3)  
BIOC 311 Metabolic Biochemistry (3)  
BIOC 312 Biochemistry of Macromolecules (3)  
CHEM 302 Intro Organic Chemistry 3 (3)

Complementary Courses (3 Credits)

ANAT 262 Intro Molecular & Cell Biol. (3)  
BIOL 303 Developmental Biology (3)  
BIOL 313 Eukaryotic Cell Biology (3)  
CHEM 352 Structural Organic Chem. (3)  
CHEM 382 Organic Chem : Natural Products (3)

U3- 12 credits in total

At least 3 credits from :

BIOC 450 Protein Structure and Function (3)  
BIOC 454 Nucleic Acids (3)  
The remaining (9) credits from the following or above :  
ANAT 261 Intro to Dynamic Histology (4)  
BIOC 404 Biophysical Chemistry (3)  
BIOC 455 Neurochemistry (3)  
BIOC 458 Membranes & Cellular Signaling (3)  
BIOL 205 Biology of Organisms (3)  
BIOL 300 Molecular Biology of the Gene (3)  
BIOL 303 Developmental Biology (3)  
BIOL 304 Evolution (3)  
BIOL 314 Molecular Biology of Oncogenes (3)  
CHEM 214 Physical Chem./Biol.Sci. 2 (3)  
CHEM 257D1 Intro Analytical Chemistry (2)  
CHEM 257D2 Intro Analytical Chemistry (2)  
CHEM 352 Structural Organic Chem. (3)  
CHEM 362 Advanced Organic Chem Lab. (2)  
CHEM 382 Organic Chem : Natural Products (3)  
CHEM 502 Advanced Bio-Organic Chem. (3)  
CHEM 572 Synthetic Organic Chem (3)  
MIMM 211 Introductory Microbiology (3)  
MIMM 314 Immunology (3)  
PHAR 300 Drug action (3)  
PHAR 301 Drugs and Disease (3)  
PHGY 209 Mammalian Physiology 1 (3)  
PHGY 210 Mammalian Physiology 2 (3)

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

3 credits from :

BIOL 373 Biometry (3)  
COMP 202 Intro to Computing 1 (3)  
**MATH 203 Principles of Statistics 1 (3)**  
PSYC 204 Intro. to Psychological Stats (3)  
MATH 222 Calculus 3 (3)

U2- 18 Credits in total

Required Courses (15 credits)

BIOC 300 D1 Laboratory in Biochemistry (3)  
BIOC 300 D2 Laboratory in Biochemistry (3)  
BIOC 311 Metabolic Biochemistry (3)  
BIOC 312 Biochemistry of Macromolecules (3)  
CHEM 302 Intro Organic Chemistry 3 (3)

Complementary Courses (3 Credits)

ANAT 262 Intro Molecular & Cell Biol. (3)  
BIOL 303 Developmental Biology (3)  
BIOL 313 Eukaryotic Cell Biology (3)  
CHEM 352 Structural Organic Chem. (3)  
CHEM 382 Organic Chem : Natural Products (3)

U3- 12 credits in total

At least 3 credits from :

BIOC 450 Protein Structure and Function (3)  
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ANAT 261 Intro to Dynamic Histology (4)  
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BIOC 455 Neurochemistry (3)  
BIOC 458 Membranes & Cellular Signaling (3)  
BIOL 205 Biology of Organisms (3)  
BIOL 300 Molecular Biology of the Gene (3)  
BIOL 303 Developmental Biology (3)  
BIOL 304 Evolution (3)  
BIOL 314 Molecular Biology of Oncogenes (3)  
CHEM 214 Physical Chem./Biol.Sci. 2 (3)  
CHEM 257D1 Intro Analytical Chemistry (2)  
CHEM 257D2 Intro Analytical Chemistry (2)  
CHEM 352 Structural Organic Chem. (3)  
CHEM 362 Advanced Organic Chem Lab. (2)  
CHEM 382 Organic Chem : Natural Products (3)  
CHEM 502 Advanced Bio-Organic Chem. (3)  
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MIMM 211 Introductory Microbiology (3)  
MIMM 314 Immunology (3)  
PHAR 300 Drug action (3)  
PHAR 301 Drugs and Disease (3)  
PHGY 209 Mammalian Physiology 1 (3)  
PHGY 210 Mammalian Physiology 2 (3)

7.0 Consultation with Related Units  Yes  No Financial Consult  Yes  No

Attach list of consultations; Mathematics (pending)

8.0 Rationale

MATH 203 has for some time been accepted on an ad hoc basis as an alternative to the complementary courses currently listed in the program as fulfilling the requirements for 3 credits in mathematics/statistics/computing in the U1 complementary list of courses. Adding MATH 203 to this list formalizes what has been our informal practice for some time.

9.0 Approvals

Routing Sequence	Name	Signature	Date
Department	BIOCHEMISTRY DYT.	DYTHON	3/11/05
Curric/Acad Committee	DR. PAUL HOLLAND	Paul Holland	1-MAR-05
Faculty 1	DEAN FUKS	Dean Fuchs	11-MAR-05
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

Submitted by

Name	John R. Silvius	To be completed by ARR:
Phone	398-7267	CIP Code
Email	John.silvius@mcaill.ca	
Submission Date	Feb. 3, 2005	

From: masoud@math.mcgill.ca  
Subject: **Re: Change to Biochemistry math requirements**  
Date: February 12, 2005 8:59:08 AM EST  
To: "John R. Silvius" <john.silvius@mcgill.ca>  
Cc: angela.white@mcgill.ca, raffaella.bruno@mcgill.ca

Dear Professor Silvius,

I am sorry for this long delay in responding to your message. I circulated the message among the members of the statistics group in our department and was waiting for their response. Members of the statistics group have all found the proposal definitely acceptable.

Since we discuss the need of our students in the service courses offered by our department from time to time, it would be very helpful to know what you expect your students learn in MATH 203. Any comment on this matter would be of great use to us to better serve our students and be appreciated very much.

Regards,

Masoud Asgharian

Dear Prof. Asgharian,

The Department of Biochemistry is proposing to add MATH 203 to the list of complementary courses in the math/statistics/computing science category for its Faculty program, as per the attached proposal form. The Faculty program is small, numbering roughly a dozen students, so I expect that only a few additional students may register for MATH 203 as a result of this change. Could you please let me know at your earliest convenience if this proposal is acceptable to your department, or should there are any objections, what these would be?

Many thanks,

John Silvius