

Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title		2.0 A	Administering Faculty/Unit					
Specify the two degrees for concurrent degree programs			Faculty of Science					
		L	Offering Fooulty/Department					
1.1 B.Sc.		ſ	Offering Faculty/Department Science/Chemistry					
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.) Chemistry		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						
1.3 Minor (with Concentration, if applicable)		405	Existing Cradit Waight Proposed Cradit Waight					
(30 char. max.)		4.0 [Existing Credit Weight Proposed Credit Weight 59 59					
1.4 Category		L						
5 ,			5.0 Rationale for revised program					
Faculty Program (FP) x Major Joint Major Major Concentration (CON) Minor Minor Concentration (CON)	Honours (HON) Joint Honours Component (HC) Internship/Co-op Thesis (T) Non-Thesis (N) Other Please specify		In order to maintain accreditation with the CSC, students are required to take 3 credits of Biological Chemistry/Biochemistry. Adding CHEM 332 to the core program will meet this requirement. In order to keep this change credit-neutral for our students, the new course CHEM 332 will replace 3 credits of complementary courses.					
1.5 Complete Program Title B. Sc. Major in Chemistry								
6.0 Revised Program Description (Maximum 150 words)								

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)

Required Courses (53 credits)

The required courses in this program consist of 53 credits in chemistry, physics and mathematics, listed below. The courses marked with an asterisk (*) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.

See http://www.chemistry.mcgill.ca/advising/inside/advisors.php.

A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 and MATH 315 during U1 is also strongly recommended. Physics PHYS 242 should be completed during U2.

- Denotes courses with CEGEP equivalents.
- ** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

CHEM 212 Introductory Organic Chemistry 1 (4 credits) CHEM 222 Introductory Organic Chemistry 2 (4 credits)

CHEM 223 Introductory Physical Chemistry 1 (2 credits)

CHEM 243 Introductory Physical Chemistry 2 (2 credits)

CHEM 253 Introductory Physical Chemistry 1 Laboratory (1 credit)

CHEM 263 Introductory Physical Chemistry 2 Laboratory (1 credit)

CHEM 281 Inorganic Chemistry 1 (3 credits)

CHEM 287 Introductory Analytical Chemistry (2 credits)

CHEM 297 Introductory Analytical Chemistry Laboratory (1 credit)

CHEM 302 Introductory Organic Chemistry 3 (3 credits)

CHEM 345 Molecular Properties and Structure 1 (3 credits)

CHEM 355 Molecular Properties and Structure 2 (3 credits)

CHEM 365 Statistical Thermodynamics (2 credits)

CHEM 367 Instrumental Analysis 1 (3 credits)

CHEM 377 Instrumental Analysis 2 (3 credits)

CHEM 381 Inorganic Chemistry 2 (3 credits)

CHEM 392 Integrated Inorganic/Organic Laboratory (3 credits)

CHEM 393 Physical Chemistry Laboratory 2 (2 credits)

MATH 222 Calculus 3 (3 credits)**

MATH 315 Ordinary Differential Equations (3 credits)

PHYS 242 Electricity and Magnetism (2 credits)

Complementary Courses (6 credits)

6 credits of additional Chemistry (CHEM) courses at the 300 level or higher

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

Required Courses (56 credits)

The required courses in this program consist of 53 credits in chemistry, physics and mathematics, listed below. The courses marked with an asterisk (*) are omitted from the program of students who have successfully completed them at the CEGEP level but the Chemistry courses must be replaced by courses in that discipline if students wish to be eligible for admission to the Ordre des chimistes du Québec. Students from outside Quebec or transfer students should consult the Academic Adviser.

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A computer science course, either COMP 202 or COMP 208, is strongly recommended during U1 for students who have no previous introduction to computer programming. Students should contact their adviser on this matter. Completion of Mathematics MATH 222 and MATH 315 during U1 is also strongly recommended. Physics PHYS 242 should be completed during U2

- * Denotes courses with CEGEP equivalents.
- ** Students who have successfully completed MATH 150 and MATH 151 are not required to take MATH 222.

CHEM 212 Introductory Organic Chemistry 1 (4 credits) * CHEM 222 Introductory Organic Chemistry 2 (4 credits) *

CHEM 223 Introductory Physical Chemistry 1 (2 credits)

CHEM 243 Introductory Physical Chemistry 2 (2 credits)

CHEM 253 Introductory Physical Chemistry 1 Laboratory (1 credit)

CHEM 263 Introductory Physical Chemistry 2 Laboratory (1 credit)

CHEM 281 Inorganic Chemistry 1 (3 credits)

CHEM 287 Introductory Analytical Chemistry (2 credits)

CHEM 297 Introductory Analytical Chemistry Laboratory (1 credit)

CHEM 302 Introductory Organic Chemistry 3 (3 credits)

CHEM 332 Biological Chemistry (3 credits)

CHEM 345 Molecular Properties and Structure 1 (3 credits)

CHEM 355 Molecular Properties and Structure 2 (3 credits)

CHEM 365 Statistical Thermodynamics (2 credits)

CHEM 367 Instrumental Analysis 1 (3 credits)

CHEM 377 Instrumental Analysis 2 (3 credits) CHEM 381 Inorganic Chemistry 2 (3 credits)

CHEM 392 Integrated Inorganic/Organic Laboratory (3 credits)

CHEM 393 Physical Chemistry Laboratory 2 (2 credits)

MATH 222 Calculus 3 (3 credits)

MATH 315 Ordinary Differential Equations (3 credits)

PHYS 242 Electricity and Magnetism (2 credits)

Complementary Courses (3 credits)

3 credits of additional Chemistry (CHEM) courses at the 300 level or

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								
Curric/Acad Committee								
Faculty 1								
Faculty 2								
Faculty 3								
SCTP								
GS								
APPC								
Senate								
Submitted by								
Name	Amy S. Blum	1	To be completed by ARR:					
Phone	514-398-623	7	CIP Code					
Email	amy.blum@r	mcqill.ca						
Submission Date	Oct 18. 2013	3						