FACULTY OF SCIENCE MEETING OF FACULTY TedayMay21, 2013, 3:00 b 4:00 p.m. Redpah Mem Adibim

AGENDA

- 1. App6Ag
- 2. R¢b6Ckin ≱ Fb¢6SkEkaAw

al Polatika, Ca

FACULTY OF SCIENCE Meeting of Faculty Monday, February 18, 2013 Leacock Council Room – L232

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-11-15to S-12-22

Prof. Richard Koestner introduced Professor Melanie Dirks, Department of Psychology , and Prof. Jacques Hurtubise introduced Professor Adam Oberman, Departme nt of Mathematics & Statistics. Each gave a three-minute presentation prior to the start of the meeting.

Dean Grant called the meeting to order at 3:05 p.m.

(1) ADOPTION OF AGENDA

Prof. Moore moved, seconded by Prof. Bell, that the Agenda be adopted.

The motion carried .

(2) <u>CANDIDATES FOR DEGREES</u>

- a) Bachelor of Arts and Science S-12-16
- 602.1 Director (Advising Services) Nicole Allard said there were 21 students graduating with the B.A. & Sc. degree, twice the number compared with February 2012.

Director Allard moved, seconded by Mr. Barry, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Arts and Science degree.

The motion carried.

b) Bachelor of Science S-12-17

602.2

602.3 Director Allard further moved, seconded by Prof. Blanchette, that the Dean be given discretionary power to make such changes in the degree list as would be necessary to prevent injustice.

The motion carried.

- 602.4 Director Allard said that the CGPA cut-off for the Dean's Honour List would be known in June. (February and June grades are combined to determine the cut-off.)
- 602.5 Director Allard thanked Mr. Peter Barry, Chief Academic Advisor, the SOUSA advisors, and all departmental advisors who were involved with the graduation lists.

(3) MINUTES OF DECEMBER 4, 2012

Prof. Moore moved, seconded by Prof. Hurtubise, that the Minutes be approved.

The motion carried .

(4) <u>BUSINESS ARISING FROM THE MINUTES</u>

There was no business arising from the Minutes.

(5) <u>REPORTS OF COMMITTEES</u>

a) Academic Committee S-12-20

The Academic Committee approved the following on Tuesday, December 11, 2012:

SECTION A: NEW COURSES

Atmospheric & Oceanic Sciences

ATOC 357	Atmospheric & Oceanic Sci Lab	AC-12-44
	3 credits	

605.1 Associate Dean Hendren said that as a result of reviewing undergraduate programs, and after surveying current students, it had been decided to institute ATOC 357. Most other meteorology programs in North American univer

The motion carried .

(2) B.A. & Sc. Program Revisions

AC-12-41

605.8 Associate Dean Hendren said that all students will now have to take the integrative course, BASC 201, as a Required course. The list of Complementary integrative courses

Associate Dean Hendren moved, seconded by Prof. Moore, that the above two program retirements be approved.

The motion carried .

(4) Biology

- Major in Biology: Quantita tive Biology Option AC-12-52
- 605.14 Associate Dean Hendren said that the Quantitative Biology Option was a fairly new thHentita

(7) <u>REPORT ON ACTIONS OF SENATE</u>

607.1 Please note that the entire Minutes of Senate are available on the Web at http://www.mcgill.ca/senate/senate-2012-2013/senate-2012-2013-meeting-documents

6. These reports were followed by Question Period Of interest was one question regarding the MUHC

A student senator posed a number of questions prompted by press stories about Arthur Porter.

The focus of the question was the nature of the relationship between the McGill Faculty of Medicine and the MUHC, including the criteria for cross appointments between the Faculty of Medicine and the MUHC.

Senator Eidelman, Dean of Medicine and Vice-Principal (Health Affairs), answered that the MUHC and McGill have a contract of affiliation, which is required for all hospitals that are recognized as university health centres. This contract lays out the responsibilities of both parties with regard to educational and research activities within the hospital and its associated research centres. In the case of physicians based at the MUHC, besides a few remaining legacy cases, all must be full-time, contract academic staff or tenure-track faculty. Most physicians are Contract Academic Staff appointees. There are also tenuretrack scientists in the MUHC who belong to a variety of departments in the Faculty of Medicine.

Provost Masi remarked that the timing of McGill's involvement is an important factor, and noted that no statements had been made in Senate in favour of McGill getting involved with MOOCs on a for-profit basis. The University has to move deliberately and involve itself with groups which share our set of values.

Senate approved the 443rd report of the Academic Policy Committee including revisions to the Regulations on Challenge of a Thesis Examination Failure.

Senate also approved two proposed amendments to the University Student Assessment Policy.

The changes are:

1. If a student, who has been granted permission to write a deferred midterm examination, cannot write it for documented reasons, the instructor may accommodate the student in any manner deemed pedagogically appropriate by the instructor, including, but not limited to, increasing the weight of the final examination beyond 75%, notwithstanding article 6.1.3 of this policy. (which states that the final can count for a

FACULTY OF SCIENCE ACADEMIC COMMITTEE Report to Faculty of Science Meeting of May 21, 2013

Academic Committee approved the following on Tuesday, March 26, 2013 and April 30, 2013.

SECTION A: New Courses

(1)	Physics PHYS 519	Advanced Biophysics 3 credits	AC-12-62 PRN 6251, V4
(2)	Environment & Econor ENVR 430/ECON 430	nics The Economics of Well being 3 credits	AC-12-73 PRN 5488, V7
<u>SECT</u>	ION B: Course Revision	<u>s</u>	
(1)	B.Sc. Mathematics & Statisti MATH 370	cs Honours Algebra 3 Change in prerequisites 3 credits	AC-12-59 PRN 6008, V3
(2)	Computer Science	Model-Driven Software Develop	۵C-12-
77		Changes in title, description 3 credits	PRN 6458, V1
	COMP 546	Computational Perception Number change [from 646]; changes in description, restriction, administering faculty 4 credits	AC-12-61 PRN 5202, V1
(3)	Biology & Physics BIOL 319/PHYS 319	Introduction to Biophysics Changes in description and prerequisites 3 credits	AC-12-64 PRN 6169, V6, PRN 6246, V1
(4)	B.A. & Sc. COGS 402	Research Cognitive Science 2 Course retirement 6 credits	MCC-12-4
<u>SECT</u>	ION C: Minor And Mode	rate Revisions to Programs	
(1)	B.Sc. Mathematics - Honours in Applied M	lathematics	AC-12-60
(2)	Biology - Honours (First Class)	in Biology	AC-12-63

New Course		Proposal Number PRN Alia Version N Submitte	Reference Is No d By	: 6251 : 12-13#1624 : 4 : Prof Kenneth J
		Edited By	/	Ragan : Prof Kenneth J Ragan
		Displa	ay Printable PD	F
	New Data			
Program Affected?	Y			
Program Change For Submitted?	r№ (Simple Change) - Si (PHYS 519) to list of co for: Honours Physics (lis Honours Math and Phys programs.	mple change: add new c mplementary courses in st prescribing 15 credits) sics (list prescribing 6 cr	ourse U3 years), and edits)	
Subject/Course/Term	PHYS 519			
	z one term			
Credit Weight or CEL	S credits			
Course Activities	Schedule Type	Hours per week]	
	A - Lecture	3		
		Total Hours per Wee Total Number of Week	ek : 3 s : 13	
Course Title	Official Course Title :	Advanced Biophysic	;5	
	Course Title in Calenda	ar :]	
Rationale	Biophysics is a dynamic still no 500-level course Department. This new c on the most fundamenta both on the theoretical (biological statistical mee (physical challenges of matter). This course wil local interdisciplinary in physical sciences.	c and booming field, but offered at McGill in the course will provide a spe al physical aspects of bid (out of equilibrium proces chanics) and experiment manipulating and imagir I naturally integrate well itiatives between the bio	there is Physics cial focus ological sses, al sides og of living into the logical and	
Responsible Instructo	pr			
Course Description	An advanced biophysic on stochastic and out of living matter.	s course, with a special f equilibrium physical pro	emphasis ocesses in	
Teaching Dept.	0293 : Physics		1	
Administering Faculty/Unit	SC : Faculty of Science			
Prerequisites	(PHYS 333 or PHYS 36 or permission of the ins Web Registration Block	62) [8htd'S 340 or PHYS 3 tructor. ed? : N	350), 	
1	I		I	

Corequisites		
Restrictions		
Supplementary Calendar Info		
Additional Course Charges		
Campus	owntown	
Projected Enrollment	0	
Requires Resources Not Currently Availab		
Explanation for Required Resources		
Required Text/Resources Sent To Library?		
Library Consulted About Availability of Resources?		
Consultation Reports Attached?		1
	z PHYS519_Consulta	ation_Bi_View
	z PHYS519_Consult	ation_Phys <u>_View</u> f
Effective Term of Implementation	01401	
File Attachments	z PHYS519_Syllabus	Biophys_FIN_ViewIf
To be completed by the Faculty		
For Continuing Studie		
Approvals Summar		
Show all comments		

Chair Edited by: Kenneth J Ragan on: Apr 29 2013

Approved by

New Course

Faculty/Unit	
Prerequisites	ECON 230D1/D2 or 25DD;1ECON 227D1/D2 or 257D1/D2 or equivalent; MATH 122 or MATH 139 or MATH 140 or MATH 150 or permission of instructor. Web Registration Blocked? : N
Corequisites	
Restrictions	ECON 430 is not open to students who have taken or are taking ENVR 430.
Supplementary Calendar Info	
Additional Course Charges	
Campus	Downtown
Projected Enrollment	30
Requires Resources Not Currently Availab	N le
Explanation for Required Resources	
Required Text/Resources Sent To Library?	
Library Consulted About Availability of Resources?	
Consultation Reports Attached?	
Effective Term of Implementation	201401
File Attachments	z syllabus-EconWB-proposal_6dec_View
To be completed by t Faculty	he
For Continuing Studie	es
Approvals Summar	у
Show all comments	

New Course

Proposal Reference: 5488Number: 12-13#861PRN Alias: 12-13#861Version No: 7Submitted By: Ms Kathryn
RouletEdited By: Ms Kathryn
RouletDisplay Printable PDF

New Data

Ν

Program Affected?

Program Change Form Submitted?

Subject/Course/Term ENVR 430

z one term

Credit Weight or CEU3s credits

Course Activities

Total Hours per Week : 3 Total Number of Weeks : 13

Administering Faculty/Unit	SC : Faculty of Science
Prerequisites	ECON 230D1/D2 or ECON 250 D1/D2; ECON 227D1/D2 or ECON 257D1/D2 or equivalent; MATH 122 or MATH 139 or MATH 140 or MATH 150 or permission of instructor. Web Registration Blocked? : N
Corequisites	
Restrictions	ENVR 430 is not open to students who have taken or are taking ECON 430.

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Revision for MATH 370

Proposal Reference :6008 Number PRN Alias :12-13#1381 Version No :3 Submitted By :Ms Raffaella Bruno Edited By :Dr Axel W Hundemer

Display Printable PDF

Summary of Changes

Current Data

Program Affected?

Program Change Form Submitted?

Subject/Course/TerrMATH 370

z one term

Credit Weight or 3 credits. CEU's

Course Activities z A - Lecture

New Data

Ν

Administering Faculty/Unit	SC : Faculty of Science	
Prerequisites	Prerequisite: MATH 251	
		Web Registration Blocked?N
Corequisites		
Restrictions		
Supplementary Calendar Info	1. Fall	
Additional Course Charges		
Campus		
Projected Enrollme	nt	
Requires Resource Not Currently Available	S	
Explanation for Required Resource	S	
Consultation Reports Attached?		
Effective Term of Implementation		201309
File Attachments		No attachments have been saved yet.
To be completed by the Faculty		
For Continuing Studies Use		

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Version DepartmentalDepartmentalDepartmentalOther Curric/Academic No. Curriculum Meeting Chair Faculty Committee Committee

				Departmental Curriculum Committee for approval Edited by: Raffae la Bruno on: Feb 19 2013
1				Submitted to Departmental Curriculum Committee for approval Created on: Feb 19 2013

Revision for COMP 533

Proposal Reference :6458 Number PRN Alias :12-13#1831 Version No :1 Submitted By :Prof Jorg Andreas Kienzle

Prerequisites	Prerequisite: COMP 335 or ECSE 321 or 303 or COMP 361	COMP
Corequisites		
Restrictions		
Supplementary Calendar Info	1. 3 hours	
Additional Course Charges		
Campus		
Projected Enrollme	nt	
Requires Resource Not Currently Available	S	
Explanation for Required Resource	S	
Consultation Reports Attached?		
Effective Term of Implementation		201309
File Attachments		No attachments have been saved yet.
To be completed by the Faculty		
For Continuing Studies Use		

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Version Departmental Departmental Other Curric/Academic Curricurric/Academic Curric/Academic Curric/Academic C

Course Number Change for COMP 646			Proposal Reference Number PRN Alias Version No Submitted By Display Printabl	e PDF	: 5202 : 12-13#575 : 1 : Mr Michael Langer	
Summary of Changes						
	Current Data		Ne	ew Data		
Program Affected?			Ν			
Program Change Form Submitted?						
Subject/Course/Ter	ngomp 646					
	z one term					
Credit Weight or CEU's	4 credits.		4 cre	edits		
Course Activities	z A - Lectur	e	Sch A - I Tota Tota	edule Type Hours Lecture 3 I Hours per Week : I Number of Weeks	Per W 3 5 : 13	eek
Course Title	Course Title on Transcript	Computational Perception	Cou Trar	rse Title on nscript	Comp Perce	putational eption
	Course Title on Calendar	Computational Perception.	Cou	rse Title on Calenc	accomp Perce	putational eption.
Rationale			l wis enco	h to change it from ourage more underg	a 6xx gradua	level to a 5xx level to tes to take it. In particular,

our undergraduate Honors Computer Science program specifies these students must take 12 credits at the 5xx

Teaching Dept.	0155 : Computer Science	0155 : Computer Science
Administering Faculty/Unit	GR : Graduate Studies	
Prerequisites		
Corequisites		
Restrictions		
Supplementary Calendar Info	1. 3 hours	1. 3 hours
Additional Course Charges		
Campus		Downtown
Projected Enrollme	nt	25
Requires Resource Not Currently Available	S	Ν
Explanation for Required Resource	S	
Consultation Reports Attached?		
Effective Term of Implementation		201309
File Attachments		No attachments have been saved yet.
To be completed by the Faculty	y	
For Continuing Studies UseNo.		
Approvals Summa	ary	
Show all comments		

Revision for BIOL 319

Proposal Reference Number: 5169PRN Alias: 12-13#542Version No: 6Submitted By: Ms Nancy NelsonEdited By: Ms Nancy NelsonDisplay Printable PDF

Summary of Changes

	following: BIOL 201, ANAT/BIOC 212, PI 232, or PHYS 253; or permission of the instructor	Web Registration Blocked?N
Corequisites		
Restrictions	Restriction: Not open to students who taken or are taking PHYS 319	nave
Supplementary Calendar Info	1. Winter	
Additional Course Charges		
Campus		Downtown
Projected Enrollme	nt	15
Requires Resource Not Currently Available	S	
Explanation for Required Resource	s	
Consultation Reports Attached?		Ν
Effective Term of Implementation		201401
File Attachments		z PhysBiol319Syllabus revision SRL 2013.doc View
To be completed by the Faculty	y	
For Continuing Studies Use		

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Version No.	Departmenta Curriculum Committee	IDepartmenta Meeting	I Departmenta Chair	Dther Faculty	Curric/Academic Committee	cFaculty	SCT	P Version Status
6					Approved Frederic Guichar Meeting Date: Fe 08 2013 Approval Date: F 8 2013 <u>View Comme</u> nts	d ab eb		Approved by Curric/Academic Committee Edited by: Nancy Nelson on: Feb 8 2013
5								Approved by Department Meeting

					Edited by: Nancy Nelson on: Feb 1 2013
4					Approved by Department Meeting Edited by: Nancy Nelson on: Dec 6 2012
3		Approved Nancy Nelson Meeting Date: Nov 30 2012 Approval Date Dec 6 2012 <u>View</u> <u>Commen</u> ts	:		Approved by Department Meeting Edited by: Nancy Nelson on: Dec 6 2012
2					Approved by Departmental Curriculum Committee Edited by: Malek Yalaoui on: Dec 5 2012
1	Approved Nancy Nelson Meeting Date: Oct 25 2012 Approval Date Nov 26 2012 <u>View</u> <u>Commen</u> ts				Approved by Departmental Curriculum Committee Created on: Nov 26 2012

following: BIOL 201, ANAT/BIOC 212, PH)'S 232, or PHYS 253; or permission of the instructor.

Web Registration Blocked?N

Corequisites

Restrictions z Restriction: Not open to students who have

Approvals Summary

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Course Retire for COGS 402

Proposal Reference Number : 6038

File Attachments	No attachments have been saved yet.
To be completed by the Faculty	
For Continuing Studies Use	

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Version Departmental No. Curriculum





COMP 250 Introduction to Computer Science (3 credits) * COMP 252 Honours Algorithms and Data Structures (3 credits) MATH 235 Algebra 1 (3 credits) MATH 242 Analysis 1 (3 credits) MATH 242 Analysis 1 (3 credits) MATH 251 Honours Advanced Calculus (3 credits) MATH 255 Honours Analysis 2 (3 credits) MATH 325 Honours Ordinary Differential Equations (3 credits) MATH 350 Graph Theory and Combinatorics (3 credits) MATH 356 Honours Probability (3 credits) MATH 357 Honours Statistics (3 credits) MATH 375 Honours Partial Differential Equations (3 credits) MATH 376 Honours Nonlinear Dynamics (3 credits) MATH 470 Honours Research Project (3 credits)

*COMP 250 may be preceded by COMP 202

Complementary Courses (18 credits)

3 credits selected from

MATH 249 Honours Complex Variables (3 credits) MATH 366 Honours Complex Analysis (3 credits)

at least 3 credits selected from : MATH 387 Honours Numerical Analysis (3 credits) MATH 397 Honours Matrix Numerical Analysis (3 credits)

and the remainder of credits selected from: COMP 362 Honours Algorithm Design (3 credits) MATH 352 Problem Seminar (1 credit) MATH 354 Honours Analysis 3 (3 credits) MATH 355 Honours Analysis 4 (3 credits) MATH 370 Honours Algebra 3 (3 credits) MATH 371 Honours Algebra 4 (3 credits) MATH 377 Honours Number Theory (3 credits) MATH 380 Honours Differential Geometry (3 credits) MATH 480 Honours Independent Study (3 credits) MATH 487 Honours Mathematical Programming (3 credits) MATH 488 Honours Set Theory (3 credits) MATH 490 Honours Mathematics of Finance (3 credits)

All MATH 500-level courses

No more than 6 credits form the following courses for which no Honours equivalent exists:

MATH 204 Principles of Statistics 2 (3 credits) MATH 329 Theory of Interest (3 credits) MATH 338 History and Philosophy of Mathematics (3 credits) MATH 348 Topics in Geometry (3 credits) MATH 407 Dynamic Programming (3 credits) MATH 537 Honours Mathematical Models in Biology (4 credits)

Other courses with the permission of the Department

COMP 252 Honours Algorithms and Data Structures (3 credits) MATH 350 Graph Theory and Combinatorics (3 credits) MATH 249 Honours Complex Variables (3 credits) MATH 366 Honours Complex Analysis (3 credits) at least 3 credits selected from : MATH 387 Honours Numerical Analysis (3 credits) MATH 397 Honours Matrix Numerical Analysis (3 credits) and the remainder of credits selected from: COMP 362 Honours Algorithm Design (3 credits) MATH 352 Problem Seminar (1 credit) MATH 354 Honours Analysis 3 (3 credits) MATH 355 Honours Analysis 4 (3 credits) MATH 370 Honours Algebra 3 (3 credits) MATH 371 Honours Algebra 4 (3 credits) MATH 377 Honours Number Theory (3 credits) MATH 380 Honours Differential Geometry (3 credits) MATH 480 Honours Independent Study (3 credits) MATH 487 Honours Mathematical Programming (3 credits) MATH 488 Honours Set Theory (3 credits) MATH 490 Honours Mathematics of Finance (3 credits) All MATH 500-level courses No more than 6 credits form the following courses for which no Honours equivalent exists: MATH 204 Principles of Statistics 2 (3 credits) MATH 329 Theory of Interest (3 credits) MATH 338 History and Philosophy of Mathematics (3 credits) MATH 348 Topics in Geometry (3 credits) MATH 407 Dynamic Programming (3 credits) MATH 537 Honours Mathematical Models in Biology (4 credits)


	(07/2004
1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit
Specify the two degrees for concurrent degree programs	Faculty of Science
	Offering Faculty/Department
1.1 B.Sc.	Science/Biology
1.2 Major (Legacy = Concentration/Option) If applicable (30 char. max.)	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
Honours in Biology	Term: 201200
1.3 Minor (with Concentration, if applicable)	201309
(30 char. max.)	4.0 Existing Credit Weight Proposed Credit Weight
	71-75 71-75
1.4 Category	5.0 Rationale for revised program
Faculty Program (FP) x 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 Complete Program Title 1.5 B.Sc. Honours in Biology Internet program Title	The Biology Department is making available a First Class Honours B.Sc., to be differentiated from the regular Honours. This involves simply a CGPA requirement.
Current Description	
The Honours program in Biology is designed expressly	as a preparation for gradua te studies and research,

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)
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 (18 credits) BIOL 200 (3) Molecular Biology BIOL 201 (3) Call Biology and Metabolism BIOL 205 (3) Biology of Organisms BIOL 205 (3) Biology of Organisms BIOL 205 (3) Introduction to Ecology and Evolution Existi(BIOL 202 ()-7(5(3).24())-6Basi)-6.7(c Gen7ethods 7ti)-6.n98676.9Bogy o7 Olgy o7 O.00sms 1

9. Approvals			
Routing Sequence	Name	Signature	Date
Department			
Curric/Acad Committee			
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			
APPC			
Senate			

8.0 Program Description (Maximum 150 words)

Interdisciplinary research that draws from the natural and physical sciences is an important aspect of modern biology. The Quantitative Biology (QB) Honours option is designed for students with a deep interest in biology who wish to gain a strong grounding in physical sciences and their application to biological questions through both coursework and an research project. The QB B.Sc. honours option has two streams ; a theoretical ecology -6.79eams

9.0 List of proposed program for the New Program/Major or Minor/Concentration.

If new concentration (option) of existing Major/Minor (program), please attach a program layout (list of all courses) of existing Major/Minor.

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

COURSE REQUIREMENTS FOR QUANTITATIVE BIOLOGY STREAMS 21 or 22 credits from one of the following two streams:

Stream 1: Theoretical Ecology and Evolutionary Biology (21 credits)

Biology - 9 credits from the following:

BIOL 206 (3) Methods in Biology of Organisms

BIOL 304 (3) Evolution

BIOL 308 (3) Ecological Dynamics

Field Courses - 3 credits from the following list or any other field course with permission:

- BIOL 240 (3) Monteregian Flora
- BIOL 331 (3) Ecology/Behaviour field course
- BIOL 334 (3) Applied Tropical Ecology
- BIOL 432 (3) Limnology

9 credits chosen from the following list, of which 6 credits must be at the 400-level or above:

- BIOL 310 (3) Biodiversity and Ecosystems
- BIOL 373 (3) Biometry
- BIOL 324 (3) Ecological Genetics
- BIOL 434 (3) Theoretical Ecology
- BIOL 510 (3) Advances in Community Ecology
- BIOL 594 (3) Advanced Evolutionary Ecology

Stream 2: Physical Biology (22 credits)

10 credits:

- BIOL 301 (4) Cell and Molecular Laboratory
- PHYS 333 (3) Thermal and Statistical Physics

[Recommendations for Theoretical Ecology and Evolutionary Biology Stream]



(07/2004)

1.0 Degree Title Specify the two degrees for concurrent degree programs

2.0 Administering Faculty/Unit

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)

n/a

Attach extra page(s) as needed

1

9. Approvals



	(07/2004)
1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit
1.1 Major (Legacy= Subject) (30-char. max.)	Offering Faculty/Department
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)	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:
1.3 Minor (with Concentration, if applicable) (30 char. max.)	4.0 Existing Credit Weight Proposed Credit Weight
1.4 Category	5.0 Rationale for revised program
 ☐ Faculty Program (FP) ☐ Major ☐ Joint Major ☐ Joint Major ☐ Major Concentration (CON) ☐ Internship/Co-op ☐ Minor ☐ Minor Concentration (CON) ☐ Non-Thesis (N) ☐ Other Please specify 	
1.5 Complete Program Title	
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) Proposed program (list courses as follows: Subj Code/Crse Num, Title, Credit weight, under the headings of: Required Courses, Complementary Courses, Elective Courses)

6 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.

PHAR 599D1 and PHAR 599D2 are taken together.

* Note: Students may take either ANAT 458 or BIOC 458.





(07/20	004)

		(07/20	04)
1.0 Degree Title Specify the two degrees for concu	rrent degree programs	2.0 Administering Faculty/Unit	
1.1 Major (Legacy= Subject) (30-char. max.)		Offering Faculty/Department	
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)		 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:	
1.3 Minor (with Concentration, if applic (30 char. max.)	cable)	4.0 Existing Credit Weight Proposed Credit Weight	
1.4 Category		5.0 Rationale for revised program	
 Faculty Program (FP) Major Joint Major Major Concentration (CON) Minor Minor Concentration (CON) 	☐ Honours (HON)		

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)

Attach extra page(s) as needed

Existing Program List

U1 Required Courses (22 credits) * Students with prior credit for CHEM 212 may take an elective in place of this course. **U1 Required Courses (22 credits)** * Students with prior credit for CHEM 212 may take an elective in place of this course.

U2 Required Courses (16 credits)

U2 Required Courses (16 credits)

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

Complementary Courses (18 credits)Complementary Courses (18 credits)18 credits selected as follows:18 credits selected as follows:3 credits selected from (usually in Year 1):3 credits selected from (usually in Year 1):

3 credits selected from (usually in Year 2):

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.





(09/2003)

		(00/2000)
1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit	
1.1 Major (Legacy= Subject) (30-char. max.)	Offering Faculty/Department	
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)	3.0 Effective Term of revision or retirement	

7.0 Consultation with Related Units	Yes	No		Financial Consult	Yes	No
Attach list of consultations	S.					
8.0 Rationale						
9.0 Approvals						
Routing Sequence		Name		Signature		Date
Department						
Curric/Acad Committee						
Faculty 1						
Faculty 2						
Faculty 3						
SCTP						
GS						
АРРС						
Senate						
Submitted by						
Name						
Phone			CIP Code			
Email						
Submission Date						

To be appended to Program Change Proposals for:

BSc; Environment; Food Prod uction and Environment

(bsc_environment_food_revision_2012.doc)

BSc (AgEnvSc); Environment; Food Production and Environment

(bscagenvsc_environment_food_revision_2012.doc)

Course list

Deleted courses shown as strikeout, added courses or other changes are shown as underlined italics Courses at Macdonald Campus are shown with (M). Numbers in ¹superscript refer to comments in the rationale.

This domain (63 credits including core) is open only to students in the B.Sc. (Ag.Env.Sc.) Major in Environment or B.Sc. in Environment program.

The business of food production is an area of human activity with a large and intimate interaction with the environment. Modern agriculturalists must strike a delicate balance between trying to provide food for themselves, their families and urban dwellers while trving to minimize environmental damage. When negative effects due to agricultural activities do occur, they are not usually the classic point-source effects that we have come to associate with industry of large cities. Rather, the effects are over extremely large land areas cumulating, perhaps, in pollution of river systems or lakes some distance away. As world populations grow, and as diets change, potentially negative interactions between agricultural systems and other facets of the environment will become more frequent. In the same way, urban sprawl will make conflicts between agriculture and urbanites more common.

This domain (63 credits including core) is open only to students in the B.Sc. (Ag.Env.Sc.) Major in Environment or B.Sc. in Environment program.

¹ The business of food production is an area of human activity with a large and intimate interaction with the environment. As global population rises, the demand for food and food production increases. This demand must be met through a combination of increased productivity of existing agricultural land and by bringing new arable land into production. This is a serious challenge for two main reasons. Firstly, there are environmental impacts of agricultural activities which can be significant and which can be difficult to assess and contain, as the effects range from loss of biodiversity due to increasing farm size, production of biofuels versus food, non-point source pollution of rivers and lakes and a loss of arable land to urbanization. Secondly, a growing population needs support from a number of different land uses (eg. urban growth, transportation, water resource use, timber resources etc.), many of which conflict, and all of which

With a judicious choice of courses, graduates of this domain may be eligible to apply for membership in the Order des agronomes du Quebec (OAQ) and the Agricultural Institute of Canada (AIC).

Program Pre-requisites or Co-requisites One of the following courses or CEGEP equivalent (e.g., CEGEP objective 00XU): BIOL 112 (3) Cell and Molecular Biology LSCI 211 (3) Biochemistry 1

One of the following courses of CEGEP equivalent (e.g., CEGEP objective 00XV): CHEM 212 (4) Introductory Organic Chemistry 1 FDSC 230 (4) Organic Chemistry

Program Requirements Students are required to take a maximum of 34 credits at the 200 level and a minimum of 15 credits at the 400 level or higher in this program. This includes core and required courses, but does not include the domain pre-/co-requisites listed above. One of: BIOL 308 (3) Ecological Dynamics

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	(illijf)



(07/2004)

1.0 Degree Title Specify the two degrees for concurrent degree programs	2.0 Administering Faculty/Unit
1.1 Major (Legacy= Subject) (30-char. max.)	Offering Faculty/Department
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)	3.0 Effective Term of revision or retirement

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)

Foundational Courses

The Freshman Program requirements include foundational courses in both Science and Arts which must be selected as

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

9. Approvals			
Routing Sequence	Name	Signature	Date
Department			
Curric/Acad Committee			
Faculty 1			
Faculty 2			
Faculty 3			
SCTP			
GS			



(07/2004)

1.0 Degree Title Specify the two degrees for concurrent degree programs		2.0 Administering Faculty/Unit		
1.1 Major (Legacy= Subject) (30-char. max.)		Offering Faculty/Department		
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)		 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:		
1.3 Minor (with Concentration, if applicable) (30 char. max.)		4.0 Existing Credit Weight Proposed Credit Weight		
1.4 Category		5.0 Rationale for revised program		
Faculty Program (FP)	Honours (HON)			
Major Joint Major	Joint Honours Component (HC)			
Major Concentration (CON)	Internship/Co-op			
Minor	Thesis (T)			
Minor Concentration (CON)	Non-Thesis (N)			
	Other			
9. Approvals				
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Routing Sequence	Name	Signature	Date	
Department				
Curric/Acad Committee				
Faculty 1				
Faculty 2				
Faculty 3				
SCTP				
GS				

1	Active and In	nactiveCou	irsesin 2013	14With No EnrolmentSinceFall20	07		
ADMIN	TEACHING				ACTIVE		
FACULT	FACULTY	SUBJECT	COURSE		COURSE		
CODE	CODE	CODE	NUMBER	COUR \$E LE	IND	COMMENTS	RETIRE
SC	SC	ATOC	552	Selec ītep lics2	Y		YES
SC	SC	ATOC	555	Fieldurse1	Y	Thiswill becomea full time course,convertedfrom ATOC400 (field courseon storm chasing)	NO
SC	SC	ATOC	556	Fieldurse2	Y	Thisis a target of opportunity. It will provide a chance for studentsto join field campaign and/or do experiments at the McGillradarsite or field site in Barbados.We have three new faculty comingon board (hopefully) that cancontribute to teaching it.	NO
GR	SC	ATOC	616	T 6e ophysica F luidDynamics	Y	We alreadyarguedfor the unretirement of ATOG666 in 2012. Those arguments till applyhere: students who enter the ATOQ graduate program come from a variety of backgrounds. For those with already strong backgrounds in atmospheric and/or oceanscience, these more specialized ourses allow students to simultaneously advance their education and satisfy program requirements.	NO
GR	SC	ATOC	666	Top ric OceanCirculation	Y	We alreadyarguedfor the unretirement of ATOG 16 in 2012; those arguments till applyhere: students who enter the ATOQ graduate program come from a variety of backgrounds. For those with already strong backgrounds in atmospheric and/or oceanscience, these more specialized courses allow students to simultaneously advance their education and satisfy program requirements.	NO
GR	SC	ATOC	669	CSSeminar	N		YES

AC1	2 66
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GR	SC	MATH	741	Top io sAnalysis2		Note: this coursewasnot on your originallist	YES
GR	SC	MATH	743	Top ics MicrolocalAnalysis		Note: this coursewasnot on your originallist	YES
GR	SC	MATH	744	Top ic SpectralTheory	Y		YES
GR	SC	MATH	762	TopinsAppliedMathematics2		Note: this coursewasnot on your originallist	YES
GR	SC	MATH	704*	Top ics MathematicalLogic	Y		NO
GR	SC	MATH	742*	TopicsMathematicalPhysics	Y		NO
GR	SC	MATH	756*	TopiosOptimization	Y		NO
GR	SC	MATH	763*	Top ios Diff. Equns.	Y		NO
GR	SC	MATH	765*	Top ios NumericalAnalysis	Y		NO
SC	MD	PHGY	517	ArtificianternalOrgans	Y		YES
				-		Thecourseis an independentstudy/research/projection	ct
GR	SC	PHYS	633	Semina/strophysics2	Y	course	NO
GR	SC	PHYS	732	TopinicAstrophysics	Y		YES
GR	SC	PHYS	733	Topino Astrophysic Schourse	ShYnRed e	en)deAnta&uÓyl/research/project	YHESS
				course		NO	
PHYS	732	Topics					

These have very general descriptors, but allow for opportunity.

3) A set of topics courses at the 700 level, with slightlymore precised escriptors. We will eliminate the ones with the suffix 2, exceptin statistics, as the only real reason to

and/or group of studentsseean opportunity for a courseon an advanced opic, and persuade the chair that it should be given. It is also, by the way, the norm at major schools across the continent. As the cost for maintaining this configuration is nil, and the time expense for reinstating numbers is considerable, we request that this stable and sane configuration be maintained. Some of the course suggested or cancellation and which we want to keep, by the way, correspond to areas in which we have recently hired, and we have faculty that will be teaching in this addition the stable are title of the stable of the st

ACfl267(Revised)

Fromhttp://www.mcgill.ca/study/2013r

2014/university regulations and resources/dergraduate/ug gi graduation honoursadulty of science deans multidisc_u g_research_list

GraduationHonours:Facultyof ScienceDean'sMultidisciplinary Undergraduate ResearchList

The Dean's Multidisciplinary Unde	Dean'sMultidisciplinaryUndergraduateResearchListrecognizesBachelorof						
Science(B.Sc.	c.)studentswho haveparticipatedin						
substantialandbroadundergraduate	h.Tobe placedon th	ne	eDean's				
MultidisciplinaryUndergraduateResearchListat grad	Juation 8 m 6kE S	óq"ĐÀ f′WÈÕ1	A ĺê óq	b\$ OÀ 0Science			



Program/Major or Minor/Concentration Revision Form

(07/2004)

1.0 Degree Title			2.0 Administering Faculty/Unit			
Specify the two degrees for concurrent degree programs			Enginee	ring		
1.1 Major (Legacy= Subject) (30-char. max.)			Offering F Faculty	Faculty/Departmen	nt of Computer Scie	nce
1.2 Concentration (Legacy = Concentration/Option) If applicable (30 char. max.)		3.0 E F c (Effective Please gir of retirem Ex. Sept	Term of revision o ve reasons in 5.0 hent . 2004 = 200409)	or retirement "Rationale" in th Retireme	ne case ent
1.3 Minor (with Concentration, if applicable) (30 char. max.) <u>Computer Science for Engineering Students</u>		T 4.0 E	Ferm: Existing C	201309 Credit Weight	Proposed Cre] dit Weight
1.4 Category		5.0 F	Rationale	for revised progra	am	
Faculty Program (FP) Major Joint Major Major Concentration (CON) <u>Minor</u> Minor Concentration (CON)	Honours (HON) Joint Honours Component (HC) Internship/Co-op Thesis (T) Non-Thesis (N) Other Please specify		CIVE 320 (Numerical Methods), ECSE 443 (Introduction to Numerical Methods in Elec Engineering) and MATH 317 (Numerical Analysis) are numerical methods courses t are substantially equivalent to COMP 350 a			SE 443 n Electrical rical urses that P 350 and
1.5 Complete Program Title						

6.0 Revised Program Description (Maximum 150 words)

Program/Major or Minor/ Concentration

Academic Committee Meeting Tuesday, March 26, 2013 3:00 P.M.

Senate Amendment to Assessment Policy

For Information

Below is the wording of the amendment to the Assessment Policy approved by Senate on January 23, 2013.

APC recommends, for Senate's approval, that Articles 3.4.3 and 8.1.1 be amended as follows:

3.4.3 Students, who for valid documented reasons (such as illness or family tragedy), cannot submit a required Assessment in a Course, on providing satisfactory proof of their inability, may apply in accordance with the Faculty procedures relating to Deferred Assessments for permission to undertake a Deferred Assessment or receive another type of accommodation, provided the application is made withi

Academic Committee Meeting Tuesday, March 26, 2013 3:00 P.M.

Below is the proposed wording for the Faculty of Science's internal guidelines regarding assignment due dates.

- FROM: University Student Assessment Policy
- 4. WRITTEN ASSIGNMENTS OTHER THAN EXAMINATIONS
- 4.1 Submission of Written Assignments other than Examinations:
- 4.1.1 Instructors shall ensure that Students are provided with sufficient time to complete in-term written Assignments prior to the commencement of the final examination period.
- 4.1.2 Unless otherwise provided by the Unit/Faculty, the due date for in-term written Assignments shall be no later than the last day of classes as specified in the University calendar.

Faculty of Science Procedures

Articles 4.1.1 and 4.1.2 above are intended to ensure that students have adequate time to work on in-term assignments as well as to prepare for their final exams. Given this, the Faculty of Science proposes the following procedures:

In courses with final exams: All written assignments must be due on or before the last day of classes.

In courses with no final exam: The due date for written in-term assignments shall be no later than the last day of the final exam period, provided that