

This PDF excerpt of Programs, Cousses and University Regulations is an archied snapshot of the web content on the date that appears in the footer of the PDF Archival copies are vaniable atwww.mcgill.ca/study

This publication proides guidance to prospects, applicants, students lty and staff

1 . McGill University reseres the right to mak

## **Publication Information**

Published by

Enrolment Services
McGill University
3415 McTavish Street
Montreal, Quebec, H3A 0C8
Canada

All contents copright 2017 by McGill University. All rights reserved, including the right to reproduce this publication, or portions thereofy ifoam.

McGill University reserves the right to makehanges to the information contained in this publication - including correcting errors, altering fees, schedules of admission and credit requirements, and issue or cancelling particular courses or programs - without prior noti®cation.

Not all courses are fæfred every year and changes can be made after publicationarys check the MineavClass Schedule link at https://horizon.mcgill.ca/pban1/bwckschd.p\_disp\_dyn\_sobtethe most up-to-date information on whether a courseteseof.

7.4.2.2 Bachelor of Science (Agricultural and VEronmental Sciences) (B.Sc.(Ag.VESc.)) or Bachelor of

# 1 **8** 5 iven

McGill's Faculties of Agricultural and Enironmental Science Arts, Science, and Leahave forged a unique approach to the study of memment through the interfaculty, trans-disciplinary McGill School of Enironment (MSE).

The growth of technologyglobalizing economies, and rapid increase in populative had dramatic and signi®canvivonmental impactsThese changes have been accompanied by an increasive greeness of the relationship between humanviactind the evironment. Extronmental problems range from local and short-term decadation through to the perturbation observer the entire globe and for manyears. The importance of human-vironment relations for evironmental and social well-being, and the convible and con-ict involved in extronmental analysis and decision making, requires a depth and breadth of knowledge. The MSE has decloped its programs with the approach of introducing students to a broad range of ideas early in the program to provide a foundation and an openness upon which more specialized, discipling the decision be utilit.

# 2 **6** b

The mission of the McGill School of Eimonment is:

- to provide a program that will delop a broad-based vironmental literary in the undegraduate population;
- . to develop opportunities for graduate students to pursue studies of vilinement at an advanced level to create future leaders and researchers; and
- to generate nwe ideas, nwe insights, nwe technologies, and nweapproaches to understanding and redressivigovermental problems through academic research and outreach that wilks aon the University ©sxisting strength in research and spans disciplinary boundaries.

Through a range of research and educational invitiation MSE aims to aid society in making itemmental choices, in the content diverse enironmental world views that will sustain healthsocieties within a ourishing biosphere.

The MSE focuses on four themes:

- . Health in a Changing Erinonment
- . Ecosystems, Biodiersity, and Conservation
- . Citizens, Communities, Institutions, and ther Emment
- . Rethinking Social-Ecological Relationships

# 3 **B U U**

For those wishing to pursue a career initemment, the McGill School of Extronment (MSE) aims to stimulate their passion for life long learning, their con®dence in questioning established norms, their ingenuity and opennewsichease and their ability to communicate and couteibefectively in all situations. We believe that these goals are best awhitethrough repeated opportunities to witnexspecience and participate inveirse academic approaches. We believe that individual achievement is maximized by assuming inherent capacity and by recognizing that not all students learn they. Standed we believe that major research achievements emege out of a dynamic, interawei community where dialogue occurs amongaged students, stafind faculty from all disciplines. Thus, the MSE approach is student-cente/Medistrive to achieve a fully integrated, transdisciplinary understanding of problems and solutions to the manand interdependent vironmental crises in a manner that bridges the social sciences and humanities with the natural and applied sciences.

The people and the programs of the McGill School of itenment are described in the following sections.

## 3 b

For advising, contact:

ProgramAdviser, Ms. Kathy Roulet Telephone: 514-398-4306 Fax: 514-398-1643

Email: kathyroulet@mcgill.ca Website:wwwmcgill.ca/mse

**Downtown Campus** 

3534 University Street Montreal, Quebec H3A 2A7 Telephone: 514-398-2827 Fax: 514-398-1643

Macdonald Campus Rowles House

21,111 Laleshore Road Sainte-Anne-de-Bellaue, Quebec H9X 3V9

Telephone: 514-398-7559 Fax: 514-398-7846

2 **b** s

Administrati ve Of®cers

Anja Geitmann; Diplom(Konstanz), Ph.D.(Siena)

Dean, Faculty of Agricultural and En vironmental Sciences

Antonia Maioni; B.A.(La/al), M.A.(Car), Ph.D.(N©western)

Dean, Faculty of Arts

Robert Leckey; B.A.(Hons.)(Qu.), B.C.L./LL.B.(McG.), S.J.D.(T)

Dean, Faculty of Law

R. Bruce Lennox; B.Sc., M.Sc., Ph.Do(T)

Dean, Faculty of Science

Sylvie de Blois; B.Sc.(McG.), M.Sc., Ph.D.(Mai)tr Director

Iwao Hirose; B.A., M.A.(Waseda), Ph.D.(SAnd.) (joint appt. with Chair, Graduate Affairs

Philosophy

Kevin Manaugh; B.A.(Naropa), M.U., Ph.D.(McG.) joint appt. with

Geography)

Kathryn Roulet; B.Sc.(rent), M.Sc.(Guelph) Program Adviser

3 Eir En ta

**Dir ector** 

Sylvie de Blois; B.Sc.(McG.), M.Sc., Ph.D.(Man)tr

**Professors** 

Peter G. Brown; B.A.(Haver.), M.A., Ph.D.(Col.) joint appt. with Gegraphy and Natural Resource Science's

Colin Chapman; B.Sc., M.A., Ph.D.(Altaj) int appt. with Anthropology)

Anthory Ricciardi; B.Sc.(Agi), M.Sc., Ph.D.(McG.)joint appt. with Redpath Museum

Associate Pofessors

Madhar Badami; B. Ech., M.S. (IIT), M.E.Des. (Calg.), Ph.D. (Bool.) (joint appt. with Shool of Urban Planning

Christopher Barrington-Leigh; S.M.(MIT), Ph.D.(Stan.), Ph.D.(Ball.) (joint appt. with Institute for Health and Sociable)

Elena Bennett; B.A.(Oberlin), M.Sc., Ph.D.i(\$60.) (joint appt. with Natural Resource Science)s

Jefrey Cardille; B.Sc.(Carn. Mell), M.Sc.(Gegia Tech.), M.Sc., Ph.D.(Wsc.) (joint appt. with Natual Resource Science)s

Sylvie de Blois; B.Sc.(Ag)(McG.), M.Sc., Ph.D.(Mont) (joint appt. with Plant Scien)ce

Jaye Ellis; B.A.(Calg.), LL.B., B.C.L.(McG.), LL.M.(BCol.) (joint appt. with Lav)

Fr d ric Fabry; B.Sc., M.Sc., Ph.D.(McG.)p(nt appt. withAtmospheric and Oceanic Scien)ces

Iwao Hirose; B.A., M.A.(Waseda), Ph.D.(SAnd.) (joint appt. with Philosophy

Nicolas Kosoy; B.Sc.(Univ. Simon Bolivar), M.Sc.(Kent), M.Sc., Ph.D.(Uni Autonoma de Barcelonaĵo(nt appt. with Natual Resource Science)s

Brian Leung; B.Sc.(BrCol.), Ph.D.(Ca) (joint appt. with Biology)

Gregory Mikkelson; B.A.(Tinity), M.S., Ph.D.(Chic.)j(int appt. with Philosoph)y

Chair, Undergraduate Affairs

#### Associate Pofessors

Raja Sengupta; B.Sc.(Bom.), M.Sc.(IIT), Ph.D.(S. Illinojo)n(t appt. with Gegraphy)

Ren e Sieber; B.Sc.(Mich. St.), MAR(W. Mich.), Ph.D.(Rutg.)joint appt. with Gegraphy)

IsmaelVaccaro; B.A. EAR CONTANT, 641. AGEN, (OP. Na.) PERIO, CORSON, SON TO BE CONTANT OF THE CONTROL OF THE CO

## Assistant Professor

Kevin Manaugh; B.A.(Naropa), M.U., Ph.D.(McG.) joint appt. with Gegraphy)

## Faculty Lecturers

Julia Freeman; B.A.(S. Fraser), M.A.(McG.), Ph.D.(Bol.)

George McCourt; B.Sc., M.Sc.(Alta.), M.Sc.(McG.)

Kathryn Roulet; B.Sc.(rent), M.Sc.(Guelph)

## Associate Members

Anthropology: John Galaty

Architecture, School of Nik Luka

Atmospheric and Oceanic SciencesrisaAriya

Biology: Lauren ChapmarAndrew Gonzalez, Irene Ggery-Ea/es, Catherine Potvin

Bioresouce EngineeringJanAdamowski, Grant Clark, Mark Lefsrud, Chandra Madramootoo

Chemical EngineeringNathalieTufenkji, VivianeYargeau

**Chemistry Christopher Barrett** 

Civil Engineering and Applied Mebanics Susan Gaskin (an-Thanh-Van Nguyen, Jim Nicell

Earth and Planetary Scienceseanne Requette

EconomicsChris GreenŢom Naylor

Electradram1, seke neutr Bngineering

# 4 profation to

If you are unsure of the domain that younwto pursue in U1, you maygieter in the Major or Faculty Program in Environment without picking a domain. However, you must pick a domain by your U2 year



Note: You must select a domain in order to graduate.

(This section does not apply to students in the B.A.&Sc., MioroDiploma programs.)

# 5 **5**h

Regulations concerning the method or abuation of any course (including those gorning supplementakeminations) are those of the course the course of the course that supplementakens are validable for courses taught in the dulties of Arts, of Science, and of Education ut not for courses taught in the aculties of Agricultural and Environmental Sciences, Engineering, or Management.



Note: All ENVR courses, regardless of where threare taught, are feered only by the Faculty of Science.

For more information on the Unersity regulations and procedures, selective sity Regulations and Resources > Undergraduate>: Examinations: General Information

# 6 6 **9** 5 p

Students in the SchoelB.A., B.A. & Sc., B.Sc., and B.Sc.(Ag. £6c.) programs may telecourses outside the adulty according to the gelations of their faculty of admission.

These rgulations are not identical:

- Arts students, se@aculty ofArts > Undergraduate> Faculty ofArts Degree Requirements> Course Requirements>: Programs Outside theaculties
  of Arts or Science ±ofF Arts Students
- Arts and Science students, seachelor of Arts and Science Undergraduate Degree Requirements Course Requirements: Course Outside the Faculties of Arts and of Science
- Science students, sefaculty of Science Undergraduates Faculty Degree Requirements Course Requirements: Courses Outside theafculties
  of Arts and Science
- . Agricultural and Emironmental Sciences students, seeculty of Agricultural & Environmental Sciences Undergraduate > About the Exculty of Agricultural and Environmental Sciences, including Sol of Human Nutrition (Undergraduate) > Faculty Information and Regulations > : Minimum Credit Requiement
- Faculty of Science students in particular should where that some courses are restricted and cannot the ftarkcredit. See the Science Of®ce for Undergraduate Student/coursing (SOUSA) website at/wwm.cgill.ca/science/student/continuingstudents/bsc/outside
- . Students in the Diploma of Einonment follow the program as speci®ed; sussection 7.8Diploma in Einironment

# 5 60 is 167 (Sp. el

The McGill School of Enironment has deeloped nine programs, which are exped on the Downtown and Macdonald campuses:

- 1. A Minor in Environment is open to all undgraduate studentsoFmore information, seeection 7.1 Minor in Environment
- A Faculty Program in Environment leading to a B.A.is open to students meeting the entrance requirements attables/FofArts. For more information, see section 7.2B.A. Faculty Program in Environment
- 3. An Interfaculty Pr ogram in Envir onment leading to a B.A. & Scis open to students meeting the entrance requirements for the BackArtsraofd Science. For more information, sesection 7.3Bachelor of Arts and Science (B.A. & Sc.) ± Interfacults Prams
- 4. An Interfaculty Pr ogram in Sustainability, Science and Societlyeading to a B.A. & Sc. is fafred by the McGill School of Extronment in partnership with the Department of Geographt is open to students meeting the entrance requirements for the Backhetsraufd Science. The more information, see Bachelor of Arts and Science Undergraduate

- 6. A Major in En vironment leading to a B.Scis open to students meeting the entrance requirements catable. For Science. For more information, see section 7.4 Major in Environment ± B.Sc. (Algnv.Sc.) and B.Sc.
- 7. An Honours Program in Environment is open to senior Enronment students in the B.A., B.A. & Sc., B.Sc.(AguEnc.) and B.Sc. open senior Enronment information, seesection 7.6Honours Program in Environment
- 8. A Joint Honours Program in Environment is open to senior Entronment students in the B.A. glee. For more information, seeection 7.7.1Bachelor of Arts (B.A.) Joint Honous Component Entronment (36 certits).
- 9. A Diploma in Environment is available only to students who we already completed a Bachelor or an wedent degree, and who want to return to university for further undegraduate study. The Diploma is dered by the Eculty of Agricultural and Enironmental Sciences, the Eulty of Arts, and the Faculty of Science. For more information, see ection 7.8 Diploma in Environment

These programs street of ofer the exibility necessary to deal with the veronment through a set of core courses that independent through a set of core courses through the set of core courses throu

The programs are designed to prepare students for further studyromement or discipline-based graduate programs, and for symplet in industry government, and education.

# 6 § g € É É

The MSE does not recommend that students in their Freshman (U0) yeathreta ANVR Core courses. Students in their U1 to U3 years are welcome to tak selected ENVR courses was if they are not in the Enironment programs. Freshman year course selections, students should refer to the website of their respective faculty.

- Students in the Sc. degree, sewwwmcgill.ca/science/student/wetudents/u0/bs@shman/speci®c
- . Students in the Sc.(AgEnv.Sc.)degree, seewww.mcgill.ca/macdonald/puspective/feshmanyear/coses
- . Students in th B.A. & Sc.326J.475 T3.

Consultation with the PrograArdviser for approval of course selection to meet program requirements is abblig Only courses at the 200/kel and above will be approved.

For more information, contact:

Ms. Kathy Roulet, MSE ProgramAdviser

Email: kathy.roulet@mcgill.ca Telephone: 514-398-4306

#### 

18 credits of complementary courses are selected as sollo

## 12 credits of MSE core courses:

Location Note: Core courses are taught at both McGill@atDwn campus and at the Macdonald campus in Sainte-Anne-devleeNew should register in Section 001 of an ENVR course that you plan to tank the Dwntown campus, and in Section 051 of an ENVR course that you planeto ntalke Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and E⁄monment
ENVR 400	(3)	Environmenta∏hought

6 credits of enironmentally related courses selected with the applic the Progran Adviser (at least 3 credits must be in natural scien Ads) to Suggested Courses is rein below.

## **6** g**6 b**

The Suggested Course List is ided into two thematic categories: Social Sciences and Popliand Natural Sciences and echnology Most courses listed at the 3 1 42.3st is diel and aboMosed Cnot mea41 2 T crd at the 3 1 4n

ECON 205	(3)	An Introduction to Political Economy
ECON 225	(3)	Economics of the Enironment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
ENVB 437	(3)	Assessing Evironmental Impact
ENVR 201	(3)	Society Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and E⁄rironment
ENVR 400	(3)	EnvironmentalThought
		Geographical Persperetis:World En

SOCI 235	(3)	Technology and Society
SOCI 254	(3)	Development and Underdelopment
SOCI 386	(3)	Contemporary Social Mæments
URBP 201	(3)	Planning the 21st Century City
URBP 506	(3)	Environmental Polig and Planning
URBP 530	(3)	Urban Environmental Planning
WILD 415*	(2)	Conservation Law

# Te by

\*\* Note: you may take MIMM 211 or LSCI 230, bit not both; you may take ENVB 315 or BIOL 432, bit not both; you may take BIOL 308 or ENVB 305, but not both.

AGRI 340	(3)	Principles of Ecologica Agriculture
AGRI 435	(3)	Soil andWater Quality Management
ANSC 326	(3)	Fundamentals of Population Genetics
ANTH 311	(3)	Primate Behaiour and Ecology
ARCH 375	(2)	Landscape
ARCH 377	(3)	Enegy, Environment and Buildings
ARCH 378	(3)	Site Usage
ATOC 215	(3)	OceansWeather and Climate
BIOL 240	(3)	Monteregian Flora
BIOL 305	(3)	Animal Diversity
BIOL 308**	(3)	Ecological Dynamics
BIOL 310	(3)	Biodiversity and Ecosystems
BIOL 342	(3)	ContemporaryTopics inAquatic Ecology
BIOL 418	(3)	Freshwater Invertebrate Ecology
BIOL 432**	(3)	Limnology
BIOL 436	(3)	Evolution and Society
BIOL 465	(3)	Conservation Biology
BREE 217	(3)	Hydrology andWater Resources
BREE 322	(3)	OrganicWaste Management
BREE 518	(3)	Ecological Engineering
BTEC 502	(3)	Biotechnology Ethics and Society
CHEE 230	(3)	EnvironmentalAspects ofTechnology
CHEM 212	(4)	Introductory Oganic Chemistry 1
CHEM 281	(3)	Inorganic Chemistry 1
CHEM 462	(3)	Green Chemistry
CIVE 225	(4)	Environmental Engineering
CIVE 323	(3)	Hydrology andWater Resources
CIVE 550	(3)	Water Resources Management
ENTO 340	(3)	Field Entomology
ENVB 210	(3)	The Biophysical Environment
ENVB 301	(3)	Meteorology
ENVB 305**	(3)	Population & Community Ecology

ENVB 315**	(3)	Science of InlandVaters
ENVB 410	(3)	Ecosystem Ecology
ENVB 415	(3)	Ecosystem Management
ENVB 529	(3)	GIS for Natural Resource Management
ENVR 200	(3)	The Global Emironment
ENVR 202	(3)	The Evolving Earth
EPSC 201	(3)	Understanding Planet Earth
EPSC 233	(3)	Earth and Life History
EPSC 425	(3)	Sediments to Sequences
EPSC 549	(3)	Hydrogeology
ESYS 301	(3)	Earth System Modelling
GEOG 200	(3)	Geographical Perspe <b>vti</b> s:World Environmental Problems
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 205	(3)	Global Change: St, Present and Future
GEOG 272	(3)	Earth©s Changing Saure
GEOG 308	(3)	Principles of Remote Sensing
GEOG 321	(3)	Climatic Ervironments
GEOG 322	(3)	Environmental Hydrology
		RunningW3gG 32vG0 1 251.636 442.6 TmTm (3gG 32v.j 1 0 0 1 25 0 0 1 165.864 474.04 Tm ((3)v.j 1 0 03 1



(3) W

(3)Se (atigy)Tj 1 0 0 1 165.8628578.4 Tm ((3))Tj 1 0 0 1 70.528578.4 TmNREPS3 233

(3) Global Perspectiv

#### 

This 18-credit Minor is intended fora Eulty of Agricultural and Emironmental Science students arad Ellity of Science students utilis open to students from other aculties as well, aceptArts, Law and Management.



Consultation with the PrograAdviser for approal of course selection to meet program requirements is abblig Only courses at the 200/kel and above will be approved.

For more information, contact:

Ms Kathy Roulet, MSE ProgramAdviser

Email: Kathy.roulet@mcgill.ca Telephone: 514-398-4306



18 credits of complementary courses are selected as/sollo

12 credits of MSE core courses:

Location Note: MSE core courses are taught at both McGill@ston campus and at the Macdonald campus in Sainte-Anne-devAbeNeu should register in Section 001 of an ENVR course that you plan to teakthe Downtown campus, and in Section 051 of an ENVR course that you planetontak the Macdonald campus.

ENVR 200 (3) The Global Emironment

Society En

ANTH 339	(3)	EcologicalAnthropology
ANTH 418	(3)	Environment and Deelopment
ANTH 512	(3)	Political Ecology
BREE 503	(3)	Water: SocietyLaw and Polig
CIVE 433	(3)	Urban Planning
ECON 205	(EQCO)	An Introduction to Political Economy
ECON 225	ESCO)	Economics of the Enironment
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change

RELG 270	(3)	Religious Ethics and the <b>Ein</b> onment
RELG 340	(3)	Religion and the Sciences
RELG 370	(3)	Religion and Human Rights
RELG 376	(3)	Religious Ethics
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society

3 credits from the following, or equivalent (e.g., CEGEP objected 00UN):

MATH 139 (4) Calculus 1 with Precalculus

MATH 140 (3) Calculus 1

## 8

3 credits of basic science from the follow, or equivalent (e.g., CEGEP objecti 00UK):

AEBI 120 (3) General Biology

BIOL 111 (3) Principles: Oganismal Biology

## § ged tsYpp e

For suggestions on courses to take your @rst year (U1), you can consult the "MSE Student Handboomilable on the MSE website (http://www.mcgill.ca/mse), or contact KathRoulet, the ProgramAdviser (kathy.roulet@mcgill.ca).

# Pign

Note: You are required to take maximum of 30 credits at the 200eleand a minimum of 12 credits at the 400elear higher in this program includes core and required courses to take not include the program prerequisites or corequisites listeed abo

Location Note: When planning your schedule and istering for courses, you should rify where each course is felfed because courses for this program are taught at both McGill@sw on campus and at the Macdonald campus in Sainte-Anne-develue

## 6 B I

Location Note: Core required courses are taught at both McGill®scollon campus and at the Macdonald campus in Sainte-Anne-develeelleu should register in Section 001 of an ENVR course that you planetontak the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and <b>E⁄ir</b> onment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

## 6 60 6 8 cP 8

Only 3 credits will be applied to the programtra credits will count as eleves.

AEBI 427	(6)	Barbados Interdisciplinary Project
AGRI 519	(6)	Sustainable Delopment Plans
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Mana

33 credits of complementary courses are chosen as/sollo

6 credits of Health and Emonment

12 credits of Fundamentals, maximum 3 credits from came category

9 credits from ListA

6 credits from List B

## a iv ten

GEOG 221\* (3) Environment and Health

## H B

\* Note: You may take BREE 217 or GEOG 322µbnot both.

AGRI 452	(3)	Water Resources in Barbados
BREE 217*	(3)	Hydrology and Water Resources
GEOG 321	(3)	Climatic Environments
GEOG 322*	(3)	Environmental Hydrology

## 9

AEBI 425	(3)	Tropical Enegy and Food
AGRI 340	(3)	Principles of EcologicaAgriculture
AGRI 411	(3)	Global Issues on Delopment, Food and Agriculture
AGRI 550	(3)	Sustained ropical Agriculture
NUTR 341	(3)	Global Food Security

## gl

AGEC 333	(3)	Resource Economics
ECON 440	(3)	Health Economics
PHIL 343	(3)	Biomedical Ethics
RELG 270	(3)	Religious Ethics and the Einonment
URBP 507	(3)	Planning and Infrastructure

## 9

<sup>\*</sup> Note: You may take BIOL 308 or ENVB 305, but not both.

AEBI 210	(3)	Organisms 1
	(3)	Organisms 2

## A v∰

 $^{\ast}$  Note: You may take BIOL 451 or NRSC 451,  $\!$   $\!$   $\!$   $\!$   $\!$   $\!$  to both.

AEBI 421	(3)	Tropical Horticultural Ecology
BIOL 451*	(3)	Research in Ecology and Desopment in Africa
BIOL 465	(3)	Conseration Biology
BIOL 553	(3)	Neotropical Emironments
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	AdvancedTopics in Ecotoxicology
NRSC 451*	(3)	Research in Ecology and Dedopment inAfrica

P6	8	M	g <b>t</b> en	
ENTO 350		(3)		Insect Biology and Control
ENTO 352		(3)		Biocontrol of Pest Insects
NRSC 333		(3)		Pollution and Bioremediation
PARA 515		(3)		Water, Health and Sanitation

# Te Maj gen

<sup>\*</sup> Note: You may take ENVB 529 or GEOG 201,ub not both.

AEBI 423	(3)	Sustainable Land Use
CHEE 230	(3)	EnvironmentalAspects ofTechnology
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 422	(3)	Montreal Urban Sustainabilitenalysis
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
WILD 421	(3)	Wildlife Conservation

or, advanced quantitate methods course (with apprator of all of

MIMM 413*	(3)	Parasitology
PARA 438	(3)	Immunology
PPHS 501	(3)	Population Health and Epidemiology
WILD 424*	(3)	Parasitology

# P

## R

3 credits of Basic Science, one of the fooling, or their equialents (e.g., CEGEP objects Chemistry OOUL):

AECH 110	(4)	General Chemistry 1
CHEM 110	(4)	General Chemistry 1

## g g s Y g s

For suggestions on courses to take your @rst year (U1), you can consult the "MSE Student Handbrook Italia on the MSE website (http://www.mcgill.ca/mse), or contact Ms. Kaytlikoulet, the Programed Viser (kathy.roulet@mcgill.ca).

## Pon

Note: Students are required to the aximum of 34 credits at the 200 elleand a minimum of 12 credits at the 400 ellear higher in this program. This includes core and required course. those not include the program pre-requisites or co-requisites listent also

Location NoteWhen planning your schedule and istering for courses, you should rify where each course is felfed because courses for this program are taught at both McGill©sw on campus and at the Macdonald campus in Sainte-Anne-develelle

## 6 6

Location Note: Core required courses for this program are taught at both McGill@swDocampus and at the Macdonald campus in Sainte-Anne-devtBeelle You should rejister in Section 001 of an ENVR course that you plan to take on the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and <b>E</b> rironment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

## 

Only 3 credits will be applied to the programtra credits will count as eleves.

AEBI 427	(6)	Barbados Interdisciplinary Project
AGRI 519	(6)	Sustainable Dælopment Plans
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in & nama

<b>Ð</b> n <b>€</b>	<b>#</b>	
ECON 230D1	(3)	MicroeconomicTheory
ECON 230D2	(3)	MicroeconomicTheory
ECON 405	(3)	Natural Resource Economics
EPSC 210	(3)	Introductory Mineralogy
EPSC 240	(3)	Geology in the Field

# Bn βn 9 #

18 credits are selected from anious categories as follows:

## 8

One of the following Statistics courses or equient:

Note: Credit given for Statistics courses is subject to certain restrictions. Students should consult the "Course Requirements" section for the Eculty of Arts.

AEMA 310	(3)	Statistical Methods 1
GEOG 202	(3)	Statistics and SpatiAlnalysis
MATH 203	(3)	Principles of Statistics 1

#### 5

6 credits from:

AGEC 333	(3)	Resource Economics
ECON 209	(3)	Macroeconomi@nalysis andApplications
ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 416	(3)	Topics in Economic Deelopment 2
ECON 511	(3)	Energy, Economy and Enironment

## A ve

9 credits chosen from twareas:

**a. a b f i b i**

Susi1 0 0 1 221.949 588.701 T1.949 588.701le LTm (Us(3))Tj 1 0 0 1 70.588.701 T1.94 (ECON 511)Tj /F0 8.

<sup>\*</sup> Note: You can tak ENVB 529 or GEOG 201ub not both; you can takBIOL 451 or NRSC 451ub not both; you can takANTH 451 or GEOG 451 ltd not both.

## A Firm

\* Note: You can take BREE 217 or GEOG 322ubnot both; you can take BIOL 308 or ENVB 305 bbt not both.

AGRI 452	(3)	Water Resources in Barbados
BIOL 308*	(3)	Ecological Dynamics
BREE 217*	(3)	Hydrology and Water Resources
ENVB 305*	(3)	Population & Community Ecology
EPSC 355	(3)	Sedimentary Geology
EPSC 549	(3)	Hydrogeology
GEOG 305	(3)	Soils and Enironment
GEOG 322*	(3)	Environmental Hydrology
SOIL 300	(3)	Geosystems

## 2 E iv **e**h

This domain is open only to students in the B.Acufty Program in Enironment.

lviser	Mentor
Ms. Kathy Roulet	Prof. Gregory Mikkelson
Telephone: 514-398-4306	Telephone: 514-398-4583
Email: kathyroulet@mcgill.ca	Email: gregory.miklelson@mcgill.ca

## 2 8 A R & En iven iven

The quest for sustainable paths to economical dependent requires scholars and practitioners to transcend the boundaries of traditional discriptiones. domain ofers students suf@cient depth and breadth of study to acquire a strong grasp of current theories, concepts, and apprince traded development. It prepares them for graduate study in interdisciplinary programs (region depth acquire a strong grasp of current theories, concepts, and apprince traded development. It prepares them for graduate study in interdisciplinary programs (region depth acquired by the social sciences (e.g., anthropological prograph, etc.).

## P

To graduate from theafculty Program in Enfronment, students are required to complete these courses by the end of their Unexearcourses can be taken using the Satisactory/Unsatisactory option. See:

http://www.mcgill.ca/study/uniersity\_regulations\_and\_resources/ungleaduate/gi\_courses\_task\_under\_the\_satastfory\_unsatisafctory\_option for details.

## B

3 credits of calculus from the folloing, or equivalent (e.g., CEGEP objecti OOUN):

MATH 139	(4)	Calculus 1 with Precalculus
MATH 140	(3)	Calculus 1

## 8

3 credits of basic science from the follog, or equivalent (e.g., CEGEP objects: Biology OOUK, Chemistry OOUL, Phics OOUR):

BIOL 111	(3)	Principles: Oganismal Biology
CHEM 110	(4)	General Chemistry 1
PHYS 101	(4)	Introductory Physics - Mechanics

## §gET tsYpE €

For suggestions on courses to etails your @rst year (U1), you can consult the "MSE Student Handboomilable on the MSE website (http://www.mcgill.ca/mse), or contact Ms. Kaytlikoulet, the Program/Adviser (kathy.roulet@mcgill.ca).

## P∰n

Note: Students are required to the ak maximum of 30 credits at the 200 elleand a minimum of 12 credits at the 400 elleor higher in this program includes core and required course. the domain prerequisites or corequisites listed. abo

Location Note: When planning your schedule and istering for courses, you should rify where each course is felfed because courses for this program are taught at both McGill©sw on campus and at the Macdonald campus in Sainte-Anne-develer

## 6 8 8

Location Note: Core required courses are taught at both McGill@scDon campus and at the Macdonald campus in Sainte-Anne-develete us should register in Section 001 of an ENVR course that you plan to teak the Downtown campus, and in Section 051 of an ENVR course that you planeto that the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and <b>⊡ir</b> onment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

6	En .	â R	cP 🖥
•		<b>y</b> 4	CII ye

Only 3 credits will be applied to the programmera credits will count as eleves.

AEBI 427 (6) Barbados Interdisciplinary Project

Sustainable De

PSYC 204	(3)	Introduction to Psychological Statistics
----------	-----	--

A vB pa	6	
6 credits from:		
AGEC 442	(3)	Economics of Internationalgricultural Development
AGRI 411	(3)	Global Issues on Delopment, Fod and Agriculture
ANTH 418	(3)	Environment and Deelopment
GEOG 310	(3)	Development and Welihoods
GEOG 408	(3)	Geograph of Development
GEOG 409	(3)	Geographies of DelopingAsia
GEOG 410	(3)	Geograph of Underdeelopment: Current Problems
URBP 520	(3)	Globalization: Planning and Change

## 8

3 credits from:

\* Note:Y

ECON 326	(3)	Ecological Economics
ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
ENVR 421	(3)	Montreal: Environmental History and Sustainability
ENVR 422	(3)	Montreal Urban Sustainabilitynalysis
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geograph
GEOG 311	(3)	Economic Geograph

## 7 8 & 6 p to p

The growth of technologyglobalization of economies, and rapid increases in population and per capita consumpted htmad dramatic winonmental impacts. The Interfaculty Program Exironment for the Bachelor of treating and Science is designed to vide students with a broad "Liberalts/Science" training. In combination with careful mentoring, this prografiers a great degree of exibility, allowing students to delop the skills and knowledge base required to accept the myriad of wironmental problems that currently need to be addressed.

## Pin

- 1. Students are required to teak maximum of 21 credits at the 200elleand a minimum of 12 credits at the 400ellear higher in this program this includes required courses.
- 2. Students must complete at least 21 credits in albelfy of Arts and at least 21 in thea Eulty of Science as part of their interfulty program and their minor or minor concentration. ENVR courses are considered courses in the science, and so the credits are split between the the purpose of this regulation.

Location Note: When planning your schedule and istering for courses, you should rify where each course is felfed because courses for this program are taught on both McGill©s word campus and at the Macdonald campus in Sainte-Anne-device.

## 8 🍹

Location Note: Core required courses are taught at both McGill@tdDn campus and at the Macdonald campus in Sainte-Anne-develledu should register in Section 001 of an ENVR course that you plan to transfer the Downtown campus, and in Section 051 of an ENVR course that you planeto that the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and E⁄monment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

## B) 6 H

36 credits of complementary courses are selected as sollo

3 credits - Senior Research Project

3 credits - Statistics

30 credits - chosen from amongstAr2eas of focus

## & cP p

Only 3 credits will be applied to the programmera credits will count as eleves.

AGRI 519	(6)	Sustainable Dælopment Plans
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Amama

## 6

## One of:

AEMA 310	(3)	Statistical Methods 1
BIOL 373	(3)	Biometry
GEOG 202	(3)	Statistics and SpatiAlnalysis
MATH 203	(3)	Principles of Statistics 1
PSYC 204	(3)	Introduction to Psychological Statistics

A

30 credits from at least three of the foliog Areas At least 6 credits must be at the 40 Welleor higher selected either from these lists or in consultation with the Program Adviser

<b>▲</b> Pþ	6a ju ,§ja	
* Note: You may t	ake BIOL 540 or ENVR	540, ltdt not both; you may tækBIOL 308 or ENVB 305, ltdt not both.
BIOL 308*	(3)	Ecological Dynamics
BIOL 432	(3)	Limnology
BIOL 441	(3)	Biological Oceanograph
BIOL 540*	(3)	Ecology of Species trasions
ENVB 305*	(3)	Population & Community Ecology
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	AdvancedTopics in Ecotoxicology
ENVR 540*	(3)	Ecology of Species Imasions
GEOG 350	(3)	Ecological Biogeograph
PLNT 460	(3)	Plant Ecology
A B	<b>\$</b> vb	
BIOL 305	(3)	Animal Diversity
BIOL 355	(3)	Trees: Ecology & Evolution
BIOL 427	(3)	Herpetology
BIOL 465	(3)	Conseration Biology
ENTO 440	(3)	Insect Diversity
MICR 331	(3)	Microbial Ecology
PLNT 358	(3)	Flowering Plant Diersity
WILD 307	(3)	Natural History of Vertebrates
WILD 350	(3)	Mammalogy
WILD 420	(3)	Ornithology
<b>a 5</b>		vb
BIOL 240	(3)	Monteregian Flora
BIOL 331	(3)	Ecology/Behaiour Field Course
BIOL 334	(3)	Applied Tropical Ecology
BIOL 553	(3)	Neotropical Enironments
GEOG 495	(3)	Field Studies - Pysical Geograpy
GEOG 499	(3)	Subarctic Field Studies
WILD 475	(3)	Desert Ecology
		6
	ate only one of: GEOG	322, BREE 217, or CIVE 323.
BREE 217*	(3)	Hydrology andNater Resources
CIVE 323*	(3)	Hydrology andWater Resources
EPSC 549	(3)	Hydrogeology

**Environmental Hydrology** 

**GEOG 322\*** 

(3)

GEOG 372	(3)	RunningWater Environments	
GEOG 537	(3)	Advanced Fluvial Geomorphology	
NRSC 540	(3)	Socio-Cultural Issues Mater	
ā. th			
NUTR 307	(3)	Metabolism and Human Nutrition	
PARA 410	(3)	Environment and Infection	
PATH 300	(3)	Human Disease	
PHAR 303	(3)	Principles ofToxicology	
A E 6			
ATOC 215	(3)	OceansWeather and Climate	
EPSC 201	(3)	Understanding Planet Earth	
GEOG 272	(3)	Earth©s Changing Sauré	
GEOG 305	(3)	Soils and Enironment	
GEOG 321	(3)	Climatic Environments	
SOIL 326	(3)	Soils in a Changing Evironment	
il in			
* Note: You may take AGEC	200 or ECON 2	208,uto not both.	
AGEC 200*	(3)	Principles of Microeconomics	
AGEC 333	(3)	Resource Economics	
ECON 208*	(3)	MicroeconomicAnalysis andApplications	
ECON 326	(3)	Ecological Economics	
ECON 347	(3)	Economics of Climate Change	
ECON 405	(3)	Natural Resource Economics	
GEOG 216	(3)	Geograph of the World Economy	
	el <b>þ</b> an		
ANTH 212	(3)	Anthropology of Deelopment	
ANTH 418	(3)	Environment and Deelopment	
ECON 313	(3)	Economic Deelopment 1	
ECON 314	(3)	Economic Deelopment 2	

# ANTH 206 (3) Environment and Culture

(3)

(3)

(3)

(3)

**GEOG 408** 

**GEOG 410** 

**POLI 227** 

POLI 445

ANTH 339 (3) EcologicalAnthropology

ENVR 421 (3) Montreal: Environmental History and Sustainability

Geograph of Development

DevelopingAreas/Introduction

Geograph of Underdeelopment: Current Problems

International Political Economy: Monetary Relations

3 credits	from:
-----------	-------

AEBI 211	(3)	Organisms 2
BIOL 305	(3)	Animal Diversity

## 3 credits from:

BIOL 465	(3)	Conservation Biology
WILD 421	(3)	Wildlife Conservation

## 5

3 credits from:

BIOL 308 (3) Ecological Dynamics

ENVB 305 (3) Population & Community Ecology

#### 6

3 credits from the following Statistics courses or equient:

Note: Credit given for Statistics courses is subject to certain restrictions. Students should consult the "Certain Chine Course Requirements" section for the Faculty of Science.

AEMA 310	(3)	Statistical Methods 1

BIOL 373 (3) Biometry

# 66 ,Pby,Mod gten

9 credits are chosen from intexte between science, policand management as follow:

<sup>\*\*</sup> Note: You may take BIOL 451 or NRSC 451, ub not both.

AEBI 423	(3)	Sustainable Land Use
AGEC 200*	(3)	Principles of Microeconomics
AGRI 550	(3)	Sustained ropical Agriculture
ANTH 418	(3)	Environment and Deelopment
BIOL 451**	(3)	Research in Ecology and Deelopment in Africa
ECON 208*	(3)	MicroeconomicAnalysis andApplications
		Economics of 208*

<sup>\*</sup> Note: You may take AGEC 200 or ECON 208, utb not both.

<b>P</b>	_
6	8

AGRI 452	(3)	Water Resources in Barbados
BIOL 240	(3)	Monteregian Flora
BIOL 331	(3)	Ecology/Behaiour Field Course
BIOL 334	(3)	Applied Tropical Ecology
BIOL 335	(3)	Marine Mammals
BIOL 553	(3)	Neotropical Emironments
ENTO 340	(3)	Field Entomology
ENVB 410	(3)	Ecosystem Ecology
GEOG 495	(3)	Field Studies - Phrsical Geograph
GEOG 499	(3)	Subarctic Field Studies
PLNT 358	(3)	Flowering Plant Dirersity
PLNT 460	(3)	Plant Ecology
WILD 401	(4)	Fisheries and Wildlife Management
WILD 475	(3)	Desert Ecology
WOOD 441	(3)	Integrated Forest Management

## 8

6 credits of general scienti®c principles selected from the whole

<sup>\*\*\*</sup> Note: You may take ANSC 326 or BIOL 324, but not both.

ANSC 326***	(3)	Fundamentals of Population Genetics
BIOL 202	(3)	Basic Genetics
BIOL 324***	(3)	Ecological Genetics
BIOL 342	(3)	ContemporaryTopics inAquatic Ecology
BIOL 432	(3)	Limnology
BIOL 434	(3)	Theoretical Ecology
BIOL 441	(3)	Biological Oceanograph
BIOL 515	(3)	Advances in Aquatic Ecology
BREE 217**	(3)	Hydrology andWater Resources
BREE 529*	(3)	GIS for Natural Resource Management
ENVB 313	(3)	Phylogeny and Biogeograph
ENVB 529*	(3)	GIS for Natural Resource Management
GEOG 272	(3)	Earth©s Changing Same
GEOG 306*	(3)	Raster Geo-Information Science
GEOG 321	(3)	Climatic Environments
GEOG 322**	(3)	Environmental Hydrology
GEOG 350	(3)	Ecological Biogeograph
LSCI 204	(3)	Genetics
MICR 331	(3)	Microbial Ecology

<sup>\*</sup> Note: You may take only one of BREE 529, ENVB 529 or GEOG 306.

<sup>\*\*</sup> Note: You may take GEOG 322 or BREE 217µbnot both.

Z 5

This domain is open only to students in the B.Sc. (Avg. SEn.) Major Environment or B.Sc. Major Environment program.

Adviser Mentor

Ms. Kathy Roulet Telephone: 514-398-4306

Email: kathyroulet@mcgill.ca

Professor Marilyn Scott
Telephone: 514-398-7996
Email: marilyn.scott@mcqill.ca

B 5\_

The Cellular concentration in this domain is open only to students in the B.Sc. (ASp.兵Major Extronment or B.Sc. Major Extronment program.

This domain considers the intacte between the vironment and human well-being, with particular focus on the triad that ties human health viridmenterent through the elements of food and infectious agents. Each of these elements is in uenced by planned and unriptammed teah disturbanceso Fexample, agricultural practices shift the balance between bene®cial and harmful ingredients of food. Use of insecticides presents dilegaration with exercise economics, and human healthe distribution of infectious diseases is in uenced by the climatic conditions that peroviders to cover with humans, by deforestation, by urbanization, and by human interestions ranging from the utilding of dams to pression of potable veter

In designing interentions that aim to prent or reduce infectious contaminants in theirenment, or to impree food production and nutritional quality not only is it important to understand methods of intention, but also to understand social forces that in understand respond to such intentions.

Students in the Cellular concentration will be these interactions in more depth, at spirit ogical level. Students in the Population concentration will gain a depth of understanding at an ecosystem that looks at society and, and population health.

6 gE tsYB e

For suggestions on courses to take your @rst year (U1), you can consult the "MSE Student Handboomik" bale on the MSE website (http://www.mcgill.ca/mse), or contact KathRoulet, the ProgramAdviser (kathy.roulet@mcgill.ca).

PEN

Note: You are required to take maximum of 33 credits at the 200dleand a minimum of 12 credits at the 400 le

BIOL 540*	(3)	Ecology of Species trasions
BIOL 553	(3)	Neotropical Emironments
ENVB 410	(3)	Ecosystem Ecology
ENVR 540*	(3)	Ecology of Species trasions
MICR 331	(3)	Microbial Ecology
		Research in Ecology and Desopment in

PARA 410 (3) Environment and Infection

Bn (Sn (S (W)

39 credits of complementary courses are selected as/sollo

24 credits - Fundamentals, maximum of 3 credits from eacharate

6 credits - ListA categories, maximum of 3 credits fromyaone category

9 credits - List B cateories, maximum of 3 credits from yaone cateory

**E**h

24 credits of fundamentals, 3 credits from eachgoatje

8	iv ten		
GEOG 221		(3)	Environment and Health
GEOG 303		(3)	Health Geograph
NRSC 221		(3)	Environment and Health
9			
GEOG 403		(3)	Global Health and Exironmental Change
GEOG 503		(3)	AdvancedTopics in Health Geograph
PPHS 529		(3)	Global Environmental Health and Burden of Disease
SOCI 234		(3)	Population and Society
SOCI 309		(3)	Health and Illness
SOCI 331		(3)	Population and Enironment
То			
ANSC 312		(3)	Animal Health and Disease
ENVB 500		(3)	AdvancedTopics in Ecotoxicology
NUTR 512		(3)	Herbs, Foods and Pytochemicals
PHAR 303		(3)	Principles ofToxicology



Note:You will not receive credit for either LSCI 211 or LSCI 202, if you/bealready received credit for both BIOL 200 and BIOL 201; you will not reveel credit for either BIOL 200 or BIOL 201 if you has already received credit for LSCI 202 and LSCI 211.

ANSC 234	(3)	Biochemistry 2
BIOL 201	(3)	Cell Biology and Metabolism
LSCI 202	(3)	Molecular Cell Biology



Note: You will not receive credit for either LSCI 211 or LSCI 202 if you whealready received credit for both BIOL 200 and BIOL 201; you will not revere credit for either BIOL 200 or BIOL 201 if you what already received credit for both LSCI 202 and LSCI 211.

BIOL 200	(3)	Molecular Biology
LSCI 211	(3)	Biochemistry 1

Au2e48 760 I h f Tj 1 0 0 11 87e483.7.567 T

## 6

One of the following Statistics courses or equient:

Note: Credit giren for Statistics courses is subject to certain restrictions. Students in Science should consult the "Extemps in Course Requirements" section for the Eulty of Science.

AEMA 310	(3)	Statistical Methods 1
MATH 203	(3)	Principles of Statistics 1

# М

ANSC 433	(3)	Animal Nutrition and Metabolism
NUTR 207	(3)	Nutrition and Health
NUTR 307	(3)	Metabolism and Human Nutrition

## A v

 $^{\star}$  Note: You may take ENVR 540 or BIOL 540, ltd not both; you mæktake BIOL 451 or NRSC 451, ltb not both.

AEBI 421	(3)	Tropical Horticultural Ecology
BIOL 451*	(3)	Research in Ecology and Descopment in Africa
BIOL 465	(3)	Conseration Biology
BIOL 540*	(3)	Ecology of Species trasions
BIOL 553	(3)	Neotropical Emironments
ENVB 410	(3)	Ecosystem Ecology
ENVR 540*	(3)	Ecology of Species trasions
MICR 331	(3)	Microbial Ecology
NRSC 451*	(3)	Research in Ecology and Descopment in Africa
PLNT 460	(3)	Plant Ecology

## A

6 credits from the following List A categories, maximum of 3 credits from yaone category:

## yal by ,B∩ ,g

\* Note: You may take BREE 217 or GEOG 322µbnot both.

AGRI 340	(3)	Principles of Ecologica Agriculture
AGRI 452	(3)	Water Resources in Barbados
AGRI 550	(3)	Sustained Tropical Agriculture
BREE 217*	(3)	Hydrology and Water Resources
GEOG 321	(3)	Climatic Environments
GEOG 322*	(3)	Environmental Hydrology

## §l TeMal g±n

<sup>\*</sup> Note: You may tale AGEC 200 or End Mana

ECON 208*	(3)	MicroeconomicAnalysis andApplications
ENVB 437	(3)	Assessing Evironmental Impact
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 422	(3)	Montreal Urban Sustainabilitynalysis
GEOG 201*	(3)	Introductory Geo-Information Science
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
PHIL 343	(3)	Biomedical Ethics
URBP 507	(3)	Planning and Infrastructure

or, advanced quantitatie methods course (with appred of Adviser).

<b>9 þ</b>	У	
ANTH 212	(3)	Anthropology of Deelopment
EDER 461	(3)	Society and Change
HIST 292	(3)	History and the Evironment
NUTR 501	(3)	Nutrition in Developing Countries
SOCI 254	(3)	Development and Undervelopment

# 6 8 8

Location Note: Core required courses for this program are taught at both McGill@swDocampus and at the Macdonald campus in Sainte-Anne-devleelle You should register in Section 001 of an ENVR course if yourse it on the Downtown campus, and in Section 051 of an ENVR course if yourse it on the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and E⁄ironment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

Only 3 credits will be applied to the programmera credits will count as eleves.

AGRI 519	(6)	Sustainable Dælopment Plans
ENVR 401	(3)	Environmental Research
FNVR 451	(6)	Research in Ahama

<b>D</b> h	8	þ

AEMA 403	(3)	Environmetrics Stage
AEMA 414	(3)	Temporal and Spatial Statistics 01

36 credits of complementary courses are selected as sollo

12 credits - Fundamentals

3 credits - Basic Enironmental Science

6 credits - Statistics, one of two ptions

15 credits - List 1 and List 2

## **E**h

12 credits of Fundamentals, 3 credits from eachgoaye

(3)

## 5

**ENVB 506** 

BIOL 308	(3)	Ecological Dynamics
ENVB 305	(3)	Population & Community Ecology
<b>þ</b> n		
ENVB 437	(3)	Assessing Evironmental Impact
MIME 308	(3)	Social Impact of Technology
<b>g</b> i		
BIOL 309	(3)	Mathematical Models in Biology

Quantitative Methods: Ecology

## 6 Te bq

ENVB 529	(3)	GIS for Natural Resource Management
GEOG 201	(3)	Introductory Geo-Information Science

#### Bi iv Sa

()r		

BREE 217	(3)	Hydrology andWater Resources
CIVE 323	(3)	Hydrology andWater Resources
ENVB 210	(3)	The Biophysical Environment
GEOG 305	(3)	Soils and Enironment
GEOG 322	(3)	Environmental Hydrology
GEOG 350	(3)	Ecological Biogeograph

#### 6

6 credits of Statistics are selected from one of the wind two options.

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Odaps information in the "Course Requirements" section for the Fully of Science. Seral Statistics courses erlap (especially with MAH 324) and cannot be teak together These rules do not apply to B.Sc.(Ag. ErSc.) students.

## þ

MATH 323	(3)	Probability
MATH 324	(3)	Statistics

## P

# One of:

AEMA 310	(3)	Statistical Methods 1
BIOL 373	(3)	Biometry

## And one of:

AEMA 411	(3)	Experimental Designs 01
CIVE 555	(3)	Environmental DataAnalysis
GEOG 351	(3)	Quantitative Methods
SOCI 461	(3)	Quantitative DataAnalysis

A total of 15 credits are chosen from the faliog two lists.

## Ł

3 credits minimum of statistics and mathematics chosen from:

\* Note: or equivalent courses to BREE 252 or BREE 319.

BIOL 434	(3)	Theoretical Ecology
BREE 252*	(3)	Computing for Engineers
BREE 319*	(3)	Engineering Mathematics

of biofuels versus food, non-point source pollution ovferis and lakes, and a loss of arable land to urbanization. Secoandlyowing population needs so from a number of diferent land uses (e.g., urban vorte, transportation, auter resource use, timber resources, etc.) y modawhich con ict, and all of w	upport
rom a number of diferent land uses (e.g., urban watb, transportation, axter resource use, timber resources, etc.)ymaawhich con ict, and all of w	hich

36 credits of complementary courses selected asvissillo

18 credits - Fundamentals

12 credits Applied Sciences

6 credits - Social Sciences/Humanities

The

	NUTR 403	(3)	Nutrition in Society
	NUTR 501	(3)	Nutrition in Developing Countries
	PARA 410	(3)	Environment and Infection
	PHAR 303	(3)	Principles ofToxicology
ł	9 <b>6</b>		
	AEBI 421	(3)	Tropical Horticultural Ecology
	AEBI 425	(3)	Tropical Enegy and Food
	AGRI 215	(3)	Agro-Ecosystems Field Course
	AGRI 325	(3)	Sustainable griculture and Fod Security
	AGRI 550	(3)	SustainedTropicalAgriculture
	BIOL 385	(3)	Plant Growth and Deelopment
	ENTO 352	(3)	Biocontrol of Pest Insects
	PLNT 302	(3)	Forage Crops and attures
	PLNT 307	(3)	Agroecology of Vegetables and Fruits
	PLNT 353	(3)	Plant Structure and Function
	PLNT 434	(3)	Weed Biology and Control
	SOIL 315	(3)	Soil Nutrient Management

Nutrition and Health

# 8 8 p

NUTR 207\*

(3)

AGRI 435	(3)	Soil andWater Quality Management
AGRI 452	(3)	Water Resources in Barbados
BIOL 465*	(3)	Conseration Biology
BIOL 553	(3)	Neotropical Exironments
BREE 217**	(3)	Hydrology andWater Resources
		OrganicW

<sup>\*</sup> Note: Students tackBIOL 465 ofWILD 421, but not both.

<sup>\*\*</sup> Note: Students tak BREE 217 or GEOG 322µbnot both.

AGEC 430 (3) Agriculture, Food and Resource Polic

Economics of Internation Algricultural Dev

MATH 203	(3)	Principles of Statistics 1
•	Te <b>t</b> a	
One of:		
ENVB 529	(3)	GIS for Natural Resource Management
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 308	(3)	Principles of Remote Sensing
Wish		
One of:		
ATOC 215	(3)	Oceans/Weather and Climate
ENVB 301	(3)	Meteorology
<b>8</b> h	9	
9 credits of fundamenta	alland saucfepr	ocesses chosen as forso
GEOG 321	(3)	Climatic Environments
And/or one of:		
GEOG 272	(3)	Earth©s Changing Sauré
SOIL 300	(3)	Geosystems
And/or one of:		
GEOG 305	(3)	Soils and Enironment
SOIL 326	(3)	Soils in a Changing Evironment
And/or one of:		

(3)

Hydrology and Water Resources

ENVR 422	(3)	Montreal Urban Sustainabilitenalysis
ESYS 301	(3)	Earth System Modelling
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
WILD 421	(3)	Wildlife Conservation
WOOD 420	(3)	Environmental Issues: <del>of</del> estry
WOOD 441	(3)	Integrated Forest Management
<b>в</b> е		
One of:		
BIOL 553	(3)	Neotropical Emironments
GEOG 495	(3)	Field Studies - Phrsical Geograph
GEOG 496	(3)	Geographical Excursion
GEOG 499	(3)	Subarctic Field Studies
WILD 475	(3)	Desert Ecology
8		
One of:		
AGEC 333	(3)	Resource Economics
ANTH 339	(3)	EcologicalAnthropology
ECON 225	(3)	Economics of the Enironment
ECON 326	(3)	Ecological Economics
ECON 405	(3)	Natural Resource Economics
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 221	(3)	Environment and Health
GEOG 408	(3)	Geograph of Development
GEOG 498	(3)	Humans inTropical Environments
NRSC 221	(3)	Environment and Health
SOCI 565	(3)	Social Change in Anama
URBP 520	(3)	Globalization: Planning and Change

12 credits total of adanced studies chosen from the foliong two lists:

# a a a a to the a

3-9 credits of advanced study of Articular Environments:

 $<sup>^{\</sup>star}$  Note: You may take BIOL 432 or ENVB 315,  $\mbox{\it tbt}$  not both.

BIOL 432*	(3)	Limnology
ENVB 315*	(3)	Science of InlandVaters
ENVB 410	(3)	Ecosystem Ecology
GEOG 350	(3)	Ecological Biogeograph
GEOG 372	(3)	RunningWater Environments
GEOG 470	(3)	Wetlands
GEOG 536	(3)	Geocryology

GEOG 550 (3) Historical EcologyTechniques

Flo

CHEM 212 (4) Introductory Oganic Chemistry 1

FDSC 230 (4) Organic Chemistry

§ g € ts Y № e

For suggestions on courses totalk your @rst year (U1), you can consult the "MSE Student Handbook Roaulet,.7 66Program(Y)Tj 1 0 0 1298.01562.3052.58

One	of:

BIOL 308	(3)	Ecological Dynamics
DIOL 300	(3)	Louidylcal Dynamics

ENVB 305 (3) Population & Community Ecology

One of:

ENVB 210 (3) The Biophysical Environment

GEOG 305 (3) Soils and Enironment

6

One of:

AEMA 310 (3) Statistical Methods 1

BIOL 373 (3) Biometry

3

One of:

ENVB 529 (3) GIS for Natural Resource Management GEOG 201 (3) Introductory Geo-Information Science

## A V

6 credits of adamced ecosystem components selected from:

BIOL 553	(3)	Neotropical Emironments
GEOG 372	(3)	RunningWater Environments
PLNT 358	(3)	Flowering Plant Dirersity
SOIL 326	(3)	Soils in a Changing Exironment
WILD 307	(3)	Natural History of/Vertebrates

## 4 vg

6 credits of adamced ecological processes selected from:

\* Note: You may take BIOL 432 or ENVB 315, but not both; you can take BREE 217 or GEOG 322 ubnot both.

BIOL 432*	(3)	Limnology
BIOL 465	(3)	Conservation Biology
BREE 217*	(3)	Hydrology andWater Resources
ENVB 315*	(3)	Science of InlandVaters
ENVB 410	(3)	Ecosystem Ecology
ENVB 500	(3)	AdvancedTopics in Ecotoxicology
GEOG 322*	(3)	Environmental Hydrology

 $j\ 144.984\ \mathsf{Tm}\ (\mathsf{GEOG}\ 31(3))\mathsf{Tj}\ 1\ \mathsf{Pollu}\ 1\ 242.148.7\mathsf{rr}\ \mathsf{Ndi0}\ 1\ 264\ \mathsf{Tm}\ (\mathsf{Microbilo})\mathsf{T0}\ 11(3))\mathsf{Tj}\ 1\ \ 1\ 117.481\ 399.7\mathsf{Tm}$ 

6 credits of social processes selected asviratio

<sup>\*\*</sup> Note: You may tale AGEC 333 and ECON 405µbnot both.

AGEC 242	(3)	ManagemenTheories and Practices
AGEC 333**	(3)	Resource Economics
ANTH 339	(3)	EcologicalAnthropology
CANS 407	(3)	Regions of Canada
ECON 405**	(3)	Natural Resource Economics
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 382	(3)	Principles Earth Citizenship
GEOG 498	(3)	Humans inTropical Environments
RELG 270	(3)	Religious Ethics and the Einonment
SOCI 565	(3)	Social Change in Anama
URBP 520	(3)	Globalization: Planning and Change
WILD 415*	(2)	Conservation Law

# g jū

9 credits of ecosystem components or management of ecosystems selected from:

AGRI 435	(3)	Soil andWater Quality Management
AGRI 452	(3)	Water Resources in Barbados
AGRI 550	(3)	Sustained Tropical Agriculture
ENVB 437	(3)	Assessing Evironmental Impact
ENVR 422	(3)	Montreal Urban Sustainabilitenalysis
GEOG 302	(3)	Environmental Management 1
GEOG 404	(3)	Environmental Management 2
PLNT 300	(3)	Cropping Systems
WILD 401	(4)	Fisheries an Wildlife Management
WOOD 441	(3)	Integrated Forest Management

## 7. WE it 🖣

This domain is open only to students in the B.Sc.(Avg. Sizn) Major Environment or B.Sc. Major Environment programs. Water Environments and Ecosystems ± Biological

Adviser	Mentor	
Ms. Kathy Roulet	Professor Brian Leung	
Telephone: 514-398-4306	Telephone: 514-398-6460	
Email: kathyroulet@mcgill.ca	Email: brian.leung2@mcgill.ca	

## Water Environments and Ecosystems + Phical

Water Environments and Ecosystems ± Hybrican		
Adviser	Mentor	
Ms. Kathy Roulet	Professor Nigel Roulet	
Telephone: 514-398-4306	Telephone: 514-398-4945	
Email: kathyroulet@mcgill.ca	Email: nigel.roulet@mcgill.ca	

<sup>\*</sup> If WILD 415 is talen, 1 additional credit of complementary courses must be taken

II B. III. vjB. ji III. E. iz ten W. III. iz IIII.

This concentration (60 credits including core) is open only to students in the B.Scx/Sg.EMajor in Entronment or B.Sc. Major in Entronment program.

To educate students in both the ecological anystipal facets of the water environment, this domain before two concentrations, with students choosing one or the other

Those electing the Biological concentration will focus on the mechanisgralating the different forms of life in vater bodiesThey will acquire, as well, a good understanding of they stical mechanisms controlling after properties. Students interested in studying the transport and transformation mechanisms of water on the planet, from very to the oceans and atmosphere, will select this dethiconcentration They will acquire, as well, a solid background in the biological processes taking place in the planet.

Graduates of this domain are quali@ed to enter other force or to pursue adviced studies in @elds such as marine biologogygraply, physical oceanograpy, and atmospheric science.

§ g € t Y ₽ e

For suggestions on courses totalk your @rst year (U1), you can consult the "MSE Student Handboomild'bales.

3 credits - Social Sciences and Polic

18 credits chosen in total from Listand List B

# y y a s Pβn y

6 credits selected as folks:

One of:

BREE 217 (3) Hydrology and Water Resources
GEOG 322 (3) Environmental Hydrology

And one of:

BIOL 308 (3) Ecological Dynamics

ENVB 305 (3) Population & Community Ecology

8

One of:

\* Note: AEMA 310 or equivalent

This concentration (60 credits including core) is open only to students in the B.Scx. Sg. FMajor in Extronment or B.Sc. Major in Extronment program.

To educate students in both the ecological anystipal facets of the water environment, this domain befres two concentrations, with students choosing one or the other

Students interested in studying the transport and transformation mechanisation mechanisation where planet, from the oceans and atmosphere, will select the Physical concentration. They will acquire, as well, a solid background in the biological processes taking place in bodies. Those electing the Biological concentration will focus on the mechanism between the different forms of life in water bodies. They will acquire, as well, a good understanding of the physical mechanisms controlling between the physical mechanisms controlling between the physical mechanisms.

Graduates of this domain are quali@ed to enter other force or to pursue adviced studies in @elds such as marine biolograpy, physical oceanograpy and atmospheric science.

6 gE tsYp s

For suggestions on courses to take your @rst year (U1), you can consult the "MSE Student Handboomilable on the MSE website (http://www.mcgill.ca/mse), or contact KathRoulet, the ProgramAdviser (kathy.roulet@mcgill.ca).

## Pg

Note: Students are required to that maximum of 30 credits at the 200 eleand a minimum of 12 credits at the 400 eleor higher in this program includes core and required courses.

Location NoteWhen planning your schedule and isstering for courses, you should rify where each course is feled because courses for this program are taught at both McGill©swato

3 credits - Statistics or Calculus

3 credits - Field course

12 credits chosen from LiAt

6 credits chosen from List B

# yd Mgy fet e Pph ∰g

(3)

6 credits selected as folks:

#### One of:

BREE 217	(3)	Hydrology andWater Resources
GEOG 322	(3)	Environmental Hydrology
And one of:		
BIOL 308	(3)	Ecological Dynamics

## 8

One of:

ENVB 305

Note: Credit given for Statistics courses is subject to certain restrictions. Students in Science should consult the "Eddaps' en Course Requirements" section for the Gulty of Science.

Population & Community Ecology

AEMA 202	(3)	Intermediate Calculus
AEMA 310*	(3)	Statistical Methods 1
MATH 203	(3)	Principles of Statistics 1
MATH 222	(3)	Calculus 3

## **8** e

3 credits selected from the folloing courses or an equalentAquatic Field course:

AGRI 452	(3)	Water Resources in Barbados
GEOG 495	(3)	Field Studies - Phsical Geograph

## Δ

12 credits chosen from:

AGRI 435	(3)	Soil andWater Quality Management
ATOC 309	(3)	Weather Radars and Satellites
ATOC 568	(3)	Ocean Physics
BREE 416	(3)	Engineering for Land Deelopment
CIVE 323	(3)	Hydrology andWater Resources
EPSC 549	(3)	Hydrogeology
GEOG 201	(3)	Introductory Geo-Information Science
GEOG 308	(3)	Principles of Remote Sensing
GEOG 537	(3)	Advanced Fluvial Geomorphology
NRSC 510	(3)	Agricultural Micrometeorology

<sup>\*</sup> Note: AEMA 310 or equivalent.

URBP 520	(3)	Globalization: Planning and Change
And/or one of:		
AEMA 305	(3)	Differential Equations
MATH 315	(3)	Ordinary Differential Equations
And/or one of:		
BREE 506	(3)	Advances in Drainage Management
BREE 509	(3)	Hydrologic Systems and Modelling
And/or one of:		
ENVB 210	(3)	The Biophysical Environment
GEOG 305	(3)	Soils and Enironment
And/or one of:		
ENVB 529	(3)	GIS for Natural Resource Management
GEOG 306	(3)	Raster Geo-Information Science

#### R

6 credits chosen from:

an taTm (T)Tj t2gic System(\$)eEdRchosen ContemporaryTopics inAquatic Ecology

<sup>\*</sup> Note: You can take BIOL 432 or ENVB 315, but not both.

5 Kin iv Spi

ATOC 215	(3)	Oceans Weather and Climate
ATOC 219*	(3)	Introduction to Atmospheric Chemistry
ATOC 315	(3)	Thermodynamics and Coenction
CHEM 219*	(3)	Introduction to Atmospheric Chemistry
GEOG 308	(3)	Principles of Remote Sensing

24 credits of complementary courses are selected as sollo

6 credits Analytical Chemistry/Calculus courses

3 credits - Statistics

9 credits - Math or Phrsical Science

6 credits - Social Science

## A SPA

One of (students will not recei credit for both):

AEMA 202 (3) Intermediate Calculus

MATH 222 (3) Calculus 3

Note: Students tækeither CHEM 267 or FDSC 213.

CHEM 267 (3) Introductory ChemicaAnalysis
FDSC 213 (3) Analytical Chemistry 1

## 8

3 credits of Statistics courses or evaluent from:

AEMA 310 (3) Statistical Methods 1
MATH 203 (3) Principles of Statistics 1

9 credits of Math or Pyrsical Science (at least 6 credits of which are at the 3000 de above):

\* Note: You may take ATOC 519 or CHEM 519, ltd not both; you may take AEMA 305 or MATH 315, but not both.

AEMA 305*	(3)	Differential Equations
ATOC 309	(3)	Weather Radars and Satellites
ATOC 519*	(3)	Advances in Chemistry of tmosphere
ATOC 540	(3)	Synoptic Meteorology 1
CHEE 230	(3)	EnvironmentalAspects ofTechnology
CHEM 243	(2)	Introductory Physical Chemistry 2
CHEM 377	(3)	InstrumentaAnalysis 2
CHEM 519*	(3)	Advances in Chemistry of tmosphere
CIVE 225	(4)	Environmental Engineering
CIVE 561	(3)	UrbanActivity, Air Pollution, and Health
COMP 208	(3)	Computers in Engineering
GEOG 505	(3)	Global Biogeochemistry
MATH 223	(3)	LinearAlgebra

MATH 315*	(3)	Ordinary Differential Equations
NRSC 333	(3)	Pollution and Bioremediation
NRSC 510	(3)	Agricultural Micrometeorology
6		
6 credits from:		
ANTH 206	(3)	Environment and Culture
ANTH 418	(3)	Environment and Deelopment
ECON 225	(3)	Economics of the Enironment
ECON 347	(3)	Economics of Climate Change
ENVR 422	(3)	Montreal Urban Sustainabilitynalysis
GEOG 221	(3)	Environment and Health
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geograph
GEOG 403	(3)	Global Health and Exironmental Change
GEOG 404	(3)	Environmental Management 2
GEOG 498	(3)	Humans inTropical Environments
RELG 270	(3)	Religious Ethics and the Finonment

Ordinary Differential Equations

(3)

# 2 E S

MATH 215\*

This domain is open only to students in the B.Sc. Majorir Enment program in the aculty of Science.

A all de a se	Mainten
Adviser	Mentor
Advisor	Wichton

Ms. Kathy Roulet

Telephone: 514-398-4306 Email: kathyroulet@mcgill.ca Professor Jeannæ Quette Telephone: 514-398-4402

Email: jeannepaquette@mcgill.ca

# 3 8 **9**0 v 6n **9**n

The resources necessary for human society/atmatched from the Earth, used asviranaterials in our actories and re®neries, and then returned to the Earth as waste. Geological processes produce resources humans depend only, also thetermine theafe of wastes in the evironment. Understanding Earth©s geologic processes prides us with the knowledge to mitigate many of our society©sveronmental impacts due to resource action and vaste disposal. Additionally, economics frequently faects what energy sources power our society and two our wastes are treated. Earth sciences and economics are essential for our understanding of the mannechanisms, both precial and social, that faect Earth©s veronment.

This domain includes the fundamentals of each discipline. Students learn of minerals, rocks, so the rand with the atmosphere. Fundamental economic theory and the economic ef

Location Note: Core required courses are taught at both McGill@td@no campus and at the Macdonald campus in Sainte-Anne-develteelfour should register in Section 001 of an ENVR course that you plan to the the Macdonald campus, and in Section 051 of an ENVR course that you planeto that the Macdonald campus.

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Erironment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

#### 

Only 3 credits will be applied to the programmatra credits will count as eleves.

AGRI 519	(6)	Sustainable Deelopment Plans
ENVR 401	(3)	Environmental Research
ENVR 451	(6)	Research in Arnama

Ðn B‡	<b>#</b>	
ECON 230D1	(3)	MicroeconomicTheory
ECON 230D2	(3)	MicroeconomicTheory
ECON 405	(3)	Natural Resource Economics
EPSC 210	(3)	Introductory Mineralogy
EPSC 212	(3)	Introductory Petrology
EPSC 220	(3)	Principles of Geochemistry
EPSC 240	(3)	Geology in the Field

## Bn ps g 🏺

24 credits of complementary courses are selected as sollo

3 credits - Statistics courses

12 credits - Economic Resources

9 credits - Natural Resources

6

One of the following Statistics courses or equient.

Note: Credit gir

ECON 314 (3) Economic Deelopment 2	
ECON 326 (3) Ecological Economics	
ECON 347 (3) Economics of Climate Change	
ECON 408 (3) Public Sector Economics 1	
ECON 409 (3) Public Sector Economics 2	
ECON 416 (3) Topics in Economic Deelopment 2	
ECON 511 (3) Energy, Economy and Exironment	
ECON 525 (3) ProjectAnalysis	
ENVB 437 (3) Assessing Evironmental Impact	
ENVR 422 (3) Montreal Urban Sustainabilithnalys	sis

# **6**

9 credits from:

\* ANTH 451 or GEOG 451 can be tearls, but not both; BIOL 451 or NRSC 451 can be tearls but not both; ENVB 529 or GEOG 201 can be tearls but not both.

AGRI 550	(3)	Sustained Tropical Agriculture
ANTH 451*	(3)	Research in Society and Weedopment in Africa
BIOL 451*	(3)	Research in Ecology and Desopment in Africa
BIOL 553	(3)	Neotropical Emironments
ENVB 500	(3)	AdvancedTopics in Ecotoxicology
ENVB 529*	(3)	GIS for Natural Resource Management
ENVR 421	(3)	Montreal: Environmental History and Sustainability
EPSC 331	(3)	Field School 2
EPSC 341	(3)	Field School 3
EPSC 355	(3)	Sedimentary Geology
EPSC 425	(3)	Sediments to Sequences
EPSC 435	(3)	Applied Geophysics
EPSC 452	(3)	Mineral Deposits
EPSC 519	(3)	Isotope Geology
EPSC 542	(3)	Chemical Oceanograph
EPSC 549	(3)	Hydrogeology
EPSC 580	(3)	Aqueous Geochemistry
EPSC 590	(3)	Applied Geochemistry Seminar
		Introductory Goo Information ScienceFTi 1 Oca1 Goo 560

Introductory Geo-Information Science5Tj 1 0gg1 Geo-.560580

SOIL 326 (3) Soils in a Changing Exironment
SOIL 535 (3) Ecological Soil Management

16 bl 8 bn iven

#### Adviser

Ms. Kathy Roulet, MSE ProgramAdviser

Telephone: 514-398-4306 Email: kathyroulet@mcgill.ca

This Program is open only to students in the B.Sc. Major wirr@mment, B.Sc.(Ag.EnSc.) Major in Exironment, B.A. Exculty Program in Exironment, and the B.A. & Sc. Interfculty Program in Exironment.

The Honours Program in Emonment ofers students the opportunity to undertally earlong research project in close association with a professionours research project of project in close association with a professionours research project of project in close association with a professionours research project in close association with a professionour project in close as a close as a

# 8 8 8 14 E ir igh

This program is open only to students in the B.Acufty Program Enronment. To be eligible for Honours, students must satisfy the requirements set by their B.A. degree.

In addition, students must satisfy the foliog:

- 1. Students apply for the Honours program in March of their U2 Seearthe Progra Adviser for details.
- 2. Applicants must have a minimum Program CAP(GPA of all required and complementary courses for the program/simcEmment taken at McGill) of 3.3 to enter the Honours program.
- 3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
- 4. Students are required to awhere minimum werall CGPA of 3.0 at graduation, and a minimum ProgramA@P3.3 to obtain Honours.
- 5. Arts (B.A.) students in the Honours rogram must also complete a minor concentration in an academic unit other than the McGill School of Environment. Please refer to the fully of Arts regulations on Honours programs found under lifty Degree Requirements", "About Program Requirements" and "Departmental Programs".

Students in the B.A. Honours programs complete the core and domain courses (54 credits) according to their chosen domain as well as the 6 credits of

Honours required courses.

At the completion of your Honours research, you arrested to present your results at an Honours Symposium, and are required to submitf armone.

At the completion of your Honours research, you appected to present your results at an Honours Symposium, and are required to subymit ayouap @nal report to the MSE Prograktdviser.

#### H & M

Note: you take either ENVR 495D1 and ENVR 495D2 (6 crediterconsecutie terms) or ENVR 495N1 and ENVR 495N2 (6 crediterconsecutie terms).

ENVR 495D1	(3)	Honours Research
ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research

## 

This program is open only to students in the B.Sc. Majorr Emment. To be eligible for Honours, students must satisfy the requirements set by their B.Sc. degree

In addition, students must satisfy the follog:

1. Students apply for the Honours program in March of their U2 searthe Programadviser for details.

- 2. Applicants must have a minimum Program GAP(GPA of all required and complementary courses for the programvint ment taken at McGill) of 3.3 to enter the Honours program.
- 3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
- 4. Students are required to a where minimum werall CGPA of 3.0 at graduation, and a minimum ProgramA@P3.3 to obtain Honours.

Students in the B.Sc. Honours programs complete the core and domain courses (60 to 66 credits) according to their chosen domain as well as the 6 credit of Honours required courses.

At the completion of your Honours research, you appected to present your results at an Honours Symposium, and are required to subymood ayocoup @nal report to the MSE Programulviser.

Ħ	8	ø
_	7	_

Note: you take either ENVR 495D1 and ENVR 495D2 (6 crediteroconsecutie terms) or ENVR 495N1 and ENVR 495N2 (6 crediteronon-consecutie terms).

ENVR 495D1	(3)	Honours Research
ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research

#### 

This program is open only to students in the B.A. & Sc. latelfty Program Enronment.

To be eligible for Honours, students must satisfy the requirements set by their B.A. & Sec. de

In addition, students must satisfy the follog:

- 1. Students apply for the Honours program in March of their U2 Searthe Programadviser for details.
- 2. Applicants must have a minimum Program GPR GPA of all required and complementary courses for the programvintomment taken at McGill) of 3.3 to enter the Honours program.
- 3. Students must earn a B grade (3.0) or higher for the Honours Research course (ENVR 495).
- 4. Students are required to achieve minimum verall CGPA of 3.0 at graduation, and a minimum ProgramAGP3.3 to obtain Honours.
- 5. B.A. & Sc. students must complete at least 21 credits inabbetly of Arts and at least 21 in theaefulty of Science as part of their Honours program and their Minor concentration or Minor programs of Programs o

Students in the B.A. & Sc. Honours programs complete the would be found for the Interculty Program in Exironment as well as the Honours required courses (6 credits).

At the completion of your Honours research, you appealed to present your results at an Honours Symposium, and are required to subymit ayooop ®nal report to the MSE Programdviser

H & À

Note:Yogram GP

- 3. Students must earn a B grade (3.0) or higher for the Honours Research courses (ENVR 496 and ENVR 497).
- 4. Students are required to achieve minimum perall CGPA of 3.0 at graduation, and a minimum ProgramAGP3.3 to obtain Honours.

Students in the B.Sc.(Ag. E.Sc.) Honours program complete the core and domain courses (60 to 63 credits) according to their chosen domain as well as the 6 credits of required Honours courses.

At the completion of your Honours research, you appected to present your results at an Honours Symposium, and are required to subyraif ayooop @nal report to the MSE Prograktdviser

H S À

ENVR 496 (3) Honours Researchaft 1

ENVR 497 (3) Honours Researchaft 2

7 till Sa iv ta

Adviser

Ms. Kathy Roulet, MSE ProgramAdviser

Telephone: 514-398-4306 Email: kathyroulet@mcgill.ca

This program is open only to students in the B. Aculity Program in Enironment.

The Joint Honours Component Temponent offers students the opportunity to undertakyealong, interdisciplinary research project in their ®nal year in close association with a profession ours research prigles excellent preparation for graduate studies, is not required for such studies. If, for some reason, students cannot complete the Joint Honours requirements at Medium and Minor Concentration.

7 8 & # 5 iv th

Students wishing to study at the honourselien two disciplines can combine joint honours program componentsy itween Arts disciplines. For a list of available joint honours programs, see 'cowiew of Programs Offered" and "Joint Honours Programs".

Joint Honours students should consult an adviser in each department for apptitive ir course selection and their interdisciplinary honours research project.

Students will enter the Joint Honours at the end of their U1 seedwill be required to maintain a PAGF 3.30 and an werall CGFA of 3.0. Whereas the Faculty Program Extronment Honours requires the student to undertak

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and E⁄monment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought
ENVR 401	(3)	Environmental Research

And 6 credits of honours research from the foiling:

Note: you take either ENVR 495D1 and ENVR 495D2 (6 crediterconsecutie terms) or ENVR 495N1 and ENVR 495N2 (6 crediterconsecutie terms).

ENVR 495D1	(3)	Honours Research
ENVR 495D2	(3)	Honours Research
ENVR 495N1	(3)	Honours Research
ENVR 495N2	(3)	Honours Research



One of the following Statistics courses or equient:

Biometry

#### N

When planning your schedule and issering for courses, you shouldn't where each course is ferfed because courses for this program are taught at both McGill©s Dwrntown campus and at the Macdonald campus in Sainte-Anne-de Belle

## 8

Location Note: The ENVR courses are ferfed on both campuse sou should register in Section 001 of an ENVR course that you plan the transition to be sourced that you plan the transition of the source that you plane to the source that you plane the y

ENVR 200	(3)	The Global Emironment
ENVR 201	(3)	Society Environment and Sustainability
ENVR 202	(3)	The Evolving Earth
ENVR 203	(3)	Knowledge, Ethics and Erironment
ENVR 301	(3)	Environmental Research Design
ENVR 400	(3)	EnvironmentalThought

12 credits of complementary courses are selected as sollo

3 credits - must be tell with the approxal of the Program Adviser in an area outside of the student@sopusedegree (e.g., those with a B.A. or explient degree must task at least 3 credits in the natural sciences; those with a B.Sc. vallequidegree must task at least 3 credits in the social sciences sistences for Suggested Courses is vegin below.

9 credits - must be task in an area of focus chosen by the student with the vapiportothe Program Adviser. At least 6 credits must be tank at the 400 keel or higher A list of Suggested Courses is vegin below.

# **6** g**6 b**

The Suggested Course List is ided into two thematic categories: Social Sciences and Poliand Natural Sciences affechnology

Most courses listed at the 300 deand higher has prerequisites ou are uged to prepare your program of study with this in mind.

This list is not meant to be leaustive. You are also encouraged teaenine the course lists of the rious domains in the timonment program for other courses that might interest you. Courses not on the Suggested Course List may be included in the diploma with the permission of Abbei Strogram

# B b y

<sup>\*</sup> Note: If WILD 415 is taken, 1 additional credit of complementary courses must be taken.

AGEC 231	(3)	Economic Systems & Griculture
AGEC 333	(3)	Resource Economics
AGEC 430	(3)	Agriculture, Food and Resource Polic
AGEC 442	(3)	Economics of Internationalgricultural Development
AGRI 210	(3)	Agro-Ecological History
AGRI 411	(3)	Global Issues on Delopment, Food and Agriculture
ANTH 206	(3)	Environment and Culture
ANTH 212	(3)	Anthropology of Deelopment
ANTH 339	(3)	EcologicalAnthropology
ANTH 418	(3)	Environment and Deelopment
ANTH 512	(3)	Political Ecology
BREE 503	(3)	Water: SocietyLaw and Polig
CIVE 433	(3)	Urban Planning
ECON 205	(3)	An Introduction to Political Economy
ECON 225	(3)	Economics of the Enironment
ECON 326	(3)	Ecological Economics

ECON 347	(3)	Economics of Climate Change
ECON 405	(3)	Natural Resource Economics
ENVB 437	(3)	Assessing Evironmental Impact
ENVR 201	(3)	Society Environment and Sustainability
ENVR 203	(3)	Knowledge, Ethics and ₩πonment
ENVR 400	(3)	EnvironmentalThought
ENVR 421	(3)	Montreal: Environmental History and Sustainability
GEOG 200	(3)	Geographical Persperentis:World Environmental Problems
GEOG 210	(3)	Global Places and Peoples
GEOG 216	(3)	Geograph of the World Economy
GEOG 221	(3)	Environment and Health
GEOG 300	(3)	Human Ecology in Geograph
GEOG 301	(3)	Geograph of Nunavut
GEOG 302	(3)	Environmental Management 1
GEOG 303	(3)	Health Geograph
GEOG 370	(3)	ProtectedAreas
GEOG 382	(3)	Principles Earth Citizenship
GEOG 403	(3)	Global Health and Enironmental Change
GEOG 408	(3)	Geographs of Development
GEOG 410	(3)	Geograph of Underdeelopment: Current Problems
GEOG 530	(3)	Global Land and Water Resources
GEOG 551	(3)	Environmental Decisions
MGPO 440	(3)	Strategies for Sustainability
NRSC 221	(3)	Environment and Health
NRSC 540	(3)	Socio-Cultural Issues M/ater
PHIL 230	(3)	Introduction to Moral Philosoph1
PHIL 237	(3)	Contemporary Moral Issues
PHIL 334	(3)	EthicalTheory
PHIL 343	(3)	Biomedical Ethics
PHIL 348	(3)	Philosophy of Law 1
POLI 212	(3)	Government and Politics - DelopedWorld
POLI 227	(3)	DevelopingAreas/Introduction
POLI 345	(3)	International Oganizations
POLI 445	(3)	International Political Economy: Monetary Relations
PSYC 215	(3)	Social Psychology
RELG 270	(3)	Religious Ethics and the Einonment
RELG 340	(3)	Religion and the Sciences
RELG 370	(3)	Religion and Human Rights
RELG 376	(3)	Religious Ethics
SOCI 222	(3)	Urban Sociology
SOCI 234	(3)	Population and Society
SOCI 235	(3)	Technology and Society
SOCI 254	(3)	Development and Underdelopment

	8
-	
	Field study semesters armadable inAfrica, Barbados, and Pama. For details, see Study Abroad & Field Studies > Undergraduate > : Field Studies and Off-Campus Courses