## memorandum

| attention | Senate | date | February 3, 2012 |
| :--- | :--- | :--- | :--- |
| from | Bill Krane, Chair | pages | $1 / 1$ |
|  | Senate Committee on |  |  |
|  | Undergraduate Studies |  |  |
| RE: | Faculty of Environment (SCUS 12-04) |  |  |

## For information:

Acting under delegated authority at its meeting of February 2, 2012, SCUS approved the following curriculum revisions effective Fall 2012:

1. Department of Archaeology (SCUS 12-04a)
(i) Reinstate ARCH 450 and 451
(ii) New Course Proposal: ARCH 375-3, From Soup to Nuts: The Archaeology of Food.
2. New Course Proposal for ENV 320W-3, Ethics and the Environment (SCUS 12-04b)
3. Department of Geography (SCUS 12-04c)
(i) Lower Division and Upper Division Requirement changes to the Geography Major and Honors Programs to include new Concentrations:
a. Society \& Environment
b. Resources, Economy, \& Environment
(ii) Lower and Upper Division Requirement changes to the Geography Environmental Specialty Major and Honors Programs

## 4. Temporarily Withdrawn Courses (SCUS 12-04d)

(i) Temporarily withdraw GEOG 412 and 417 (non W courses)

Senators wishing to consult a more detailed report of curriculum revisions may do so by going to Docushare: https://docushare.sfu.ca/dsweb/View/Collection-12682
If you are unable to access the information, please call 778-782-3168 or email shelley gairßasfu.ca.

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FAX 778.782.8788
fenv-info(a)sfu.ca www.fenv.sfu.ca/

Jo Hinchliffe
Assistant Registrar
SCUS 12-04a (i)
Student Services

December 14, 2011

Greetings Jo,

# MADE TEMPORARILY WITHDRAWN 

In October 2010 following two courses were remold from in error. $\neq$

| ARCH 450 | Practicum III |
| :--- | :--- |
| ARCH 451 | Practicum IV |

The Archaeology Department and the Faculty of Environment would like these courses reactivated so that they may appear in the calendar and be scheduled from summer 2012.


FENV Associate Dean


Dan Burns
FENV Manager Academic and Curriculum Planning


* As requertes
by
pASS


## Chris Papaianni

Archaeology Manager Academic and Administrative Services

## FACULTY OF ENVIRONMENT

SCUS 12-04a (ii)

MEMO

Dean's Office
TASC 2. Suite 8900
Tel: 778-782-8787
Fax: 778-782-8788
www.fenv.sfu.ca

ATTENTION Bill Krane, Chair, SCUS
FROM Duncan Knowler, Chair, FENV Curriculum Committee

RE Faculty of Environment Course and Program Changes
DATE December 21, 2011
A. The following were approved by the Faculty of Environment Undergraduate Curriculum Committee at its meeting of December 1, 2011 and are being forwarded to SCUS for approval and recommendation to Senate.
i. Department of Archaeology (ARCH)

ARCH 375-3 - new course proposal
ii. Faculty of Environment (ENV)

ENV 320-3 - new course proposal
iii. Department of Geography (GEOG)
changes to BA major, BA honours, BA Environmental Specialty major and BA Environmental Specialty honours to indicate "concentrations"

PLEASE NOTE: For the Geography changes we wish to include approval for indicating the "concentration" on students' transcripts. Could you please consider this together with the above noted changes.
B. Temporary withdrawal of GEOG $412 \& 417$ (see attached memo)

Please add these items to the agenda for the next SCUS meeting.

Thanks kindly,


Duncan Knowler Associate Dean, FENV

COURSE NUMBER ARCH 375-3

## COURSE TITLE

LONG - for Calendar/schedule, no more than 100 characters including spaces and punctuation
From Soup to Nuts: The Archaeology of Food


#### Abstract

AND SHORT - for enrollment/transcript, no more than 30 characters including spaces and punctuation The Archaeology of Food

CREDITS Indicate number of credits for: Lecture 3 Seminar $\qquad$ Tutorial $\qquad$ Lab $\qquad$ COURSE DESCRIPTION (FOR CALENDAR). 3-4 LINES MAXIMUM. ATTACH A COURSE OUTLINE TO THIS PROPOSAL. Examines the origin, development, and cultural significance of the foods we eat. We will delve into the role of food in human evolution and the development of food ways through time. Students are exposed to various approaches taken by archaeologists, anthropologists, palaeoanthropologists, and historians in the study of food and food ways.


## PREREQUISITE

Arch 201 or 45 units

## COREQUISITE

## SPECIAL INSTRUCTIONS

That is, does this course replicate the content of a previously-approved course to such an extent that students should not receive credit for both courses? If so, this should be noted in the prerequisiite.

## COURSES(S) TO BE DELETED IF THIS COURSE IS APPROVED

NOTE: APPROPRIATE DOCUMENT FOR DELETION MUST BE SUBMITTED TO SCUS
None

## RATIONALE FOR INTRODUCTION OF THIS COURSE

Food, diet, and subsistence studies are a critical part of archaeological research. The past several years in particular have withessed an explosion of research completed on the archaeology \& anthropology of food and foodways. This course will be a valuable addition as an Environmental Archaeology course in our new curriculum.

## SCHEDULING AND ENROLLMENT INFORMATION

Indicate effective term and year course would first be offered and planned frequency of offering thereafter:
Fall 2012
(NOTE:There is a two-term wait for implementation of any new course.)
Indicate if there is a waiver required: $\square$ YES $\square$ NO Will this be a required or elective course in the curriculum? $\square$ Required $\square$ Elective 60
What is the probable enrollment when offered? Estimate $\qquad$

Which of your present CFL facult; have the expertise to offer this course?
Cathy D'Andrea, Dana Lepofsky

Are there any proposed student fees associated with this course other than tuition fees? $\square$ $\square$ yes NO
(If yes, attach mandatory supplementary fee approval form.)

## RESOURCE IMPLICATIONS

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by a library report and, if appropriate, confirmation that funding arrangements have been addressed.
Campus where course will be taught Burnaby
Library report status
Initiated

Provide details on how existing instructional resources will be redistributed to accommodate this new course. For example, will another course be eliminated or will the frequency of offering of other courses be reduced; are there changes in pedagogical style or class sizes that allow for this additional course offering?
Adding this course will not significantly impact our other offerings. It may mean that D'Andrea will teach only 1 section of Arch 100 rather than 2. Other faculty or sessionat instructors can teach Arch 100.

List any outstanding resource issues to be addressed prior to implementation: space, laboratory equipment, etc:
None

Articulation agreenent reviewed? $\quad \square$ YES $\quad \square$ NO $\quad$ Not applicable

## OTHER IMPLICATIONS

SI NATE (')A: MITRE ON<br>('NDERGRA, VAT: STUDIES

NEW COURSE PROPOSAL
3013 PAGES

## APPROVALS

1 Departmental approval indicates that the Department or School his approved the content of the course, and has consulted with other Departifenty/Sclook/raculties regarding proposed course content and overlap issues.


$\qquad$


Chair, Faculty Curriculum Committee


## Date

2 Faculty approval indicates that all the necessary course content and overlap concerns have been resolved, ind that the Faculty approval indicates that all the necessary course content and overlap con
Faculty /S clyool D parament commits to providing the required Library funds.

 documentary evade: et res oses.

 the new e. our e:


3 SCUS approval indicates that the course has been approved for implementation subject, where appropriate, to financial issues being addressed.

COURSE APPROVED BY SCUS (Chair of SCUS):
$\qquad$
$\qquad$ Dits $\qquad$
APPROVAL IS SIGNIFIED BY DATE AND APPROPRIATE SIGNATURE.

# ARCHAEOLOGY 397 <br> From Soup to Nuts: The Archaeology of Food 

Instructor: Dr. Catherine D'Andrea

Office: EDU 9635
Tel: 778 782-5790
E-mail: adandrea@sfu.ca
Office Hours: TBA

Office: EDU 9644
Tel: 778 782-4178
E-mail: TBA
Office Hours: TBA

Prerequisites: Arch 201 or 45 credit hours.
Required Readings: Will be assigned each week.

## This course may be used as an upper division course requirement for Group II, Environmental Archaeology Courses.

## Course Description and Objectives:

Food is a universal human requirement, and over time cultures from around the world have developed radically different cuisines. Or have they? In this course we will examine the origin, development, and cultural significance of the foods we eat. We will delve into the role of food in human evolution and the development of food ways through time. We will discover the earliest known foods, and foods of foraging societies, first farmers, early states, the global scale food exchange with the "discovery" of the New World, and the future of food. Students are exposed to various approaches taken by archaeologists, anthropologists, palaeoanthropologists, and historians in the study of food and food ways.
Grade Distribution:
Lecture Exam 30\%
Research Paper 30\%
Group Seminar Presentation....... 30\%
Seminar Participation.................. 10\%

## Research paper:

Each student will write a paper involving a critical investigation of the origin, development (including domestication history, where applicable), and cultural significance of a modern food (topic to be approved by the Instructor), e.g., maize, coffee, goat, salmon, carrots, beer, chocolate, beef, sweet potato, banana, coconuts, kumquats, etc. Choose your favourite food-creativity is strongly encouraged!

## Group project and seminar presentation:

Class will be divided into groups of 5 and each team will examine the origin, history and cultural significance of a regional cuisine (to be approved by the Instructor), e.g., India, Middle East, Africa, Europe, Mexico, China, etc.

## COURSE NUMBER <br> ENV 320-3 W

COURSE TITLE
LONG - for Calendar, schedule, no more than 100 characters including spaces and punctuation
Ethics and the Environment

## AND

SHORT - for enrollment transcript, no more than 361 characters including spaces and punctuation

## Ethics and the Environment

## CREDITS

Indicate number of credits for: Lecture $\quad 3 \quad$ Seminar ___ Lutorial ___ Lab_

COURSE DESCRIPTION (FOR CALENDAR). 3-4 LINES MAXIMUM. ATTACH A COURSE OUTLINE TO THIS PROPOSAL.
An introduction to the field of environmental ethics for non-specialists. Addresses questions such as what obligations we have to future generations and the natural world, as well as the extent of these obligations.

## PREREQUISITE

Students must have earned at least 45 units. Students who have taken PHIL 333-3 or ENV 399-3 "Special Topics in Envirenmental-Ethies" prior to or in 2011 and students with credit in PHIL-328-3-may-not enroll in this course-for-further credit. Philosophy Majors and Minors may not take this course for credit towards their major or minor degree.

## COREQUISITE

N/A

## SPECIAL INSTRUCTIONS

That is, does this course replicate the content of a previously-approved course to such an extent that students should not receive credit for both courses.? If so, this should be noted in the prerequisiite.

COURSES(S) TO BE DELETED IF THIS COURSE IS APPROVED NOTE: APPROPRIATE DOCUMENT FOR DELETION MUST BE SUBMITTED TO SCUS N/A

## RATIONALE FOR INTRODUCTION OF THIS COURSE

This course will be one of three ENV courses (ecological economics, environmental ethics and environmental law) that will be required in the redesigned EVSC major program. Thus, this course is intended for students who are non-specialists in PHIL. Intent is for this to be a UD "W" course in the EVSC program.

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SENATE (:OMMITTEE ()N NEW COURSEPROPOSAL
UNDERGRADUATE STUDIES 2 ()F 3 PAGES
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SCHEDULING AND ENROLLMENT INFORMATION
Indicate effective term and year course would first be offered and planned frequency of offering thereafter:

## Fall 2012

(NOTE:There is a two-term wait for implementation of an; new course.)
Indicate if there is a wiver required: $\square$ YES $\quad \square$ NO Will this be a required or elective course in the curriculum? $\square$ Required $\square$ Elective

What is the probable enrollment when offered? Estimate 35 to 50

Which of your present CFL faculty have the expertise to offer this course?
Dai Heide (via buyout from PHIL)

Are there any proposed student fees associated with this course other than mition fees? $\square$ YES $\square$ NO (If yes, attach mandatory supplementary fee approval form.)

## RESOURCE IMPLICATIONS

NOTE: Senate has approved (S.93-11) that no new course should be approved by Senate until funding has been committed for necessary library materials. Each new course proposal must be accompanied by a library report and, if appropriate, confirmation that funding arrangements have been addressed.

Campus where course will be taught Burnaby
Library report status
in progress

Provide details on how existing instructional resources will be redistributed to accommodate this new course. For example, will another course be eliminated or will the frequency of offering of other courses be reduced; are there changes in pedagogical style or class sizes that allow for this additional course offering?

FENV does not currently have expertise for the teaching of this course so we anticipate the required buyout from PHIL will continue for the foreseeable future. Funding will be provided by the Collaborative Teaching Fellows Program managed by the FENV Dean's Office.

List any outstanding resource issues to be addressed prior to implementations space, laboratory equipment, etc:
N/A

Articulation agreement revieved: $\square$ YES $\square$ N() $\quad$ Not applicable
OTHER IMPLICATIONS

## APPROVALS

1 Departmental approval indicates that the Department or School has approved the content of the course, and has consulted with other Departments/Schools/Faculties regarding proposed course content and overlap issues.


LIST which other Departments, Schools and Faculties have been consulted regarding the proposed course content, including overlap issues. Attach documentary evidence of responses.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
Other Faculties approval indicated that the Dean(s) or Designate of other Faculties AFFECTED by the proposed new course support(s) the approval of the new course:
$\qquad$
3 SCUS approval indicates that the course has been approved for implementation subject, where appropriate, to financial issues being addressed.

COURSE APPROVED BY SCUS (Chair of SCUS):
$\qquad$
APPROVAL IS SIGNIFIED BY DATE AND APPROPRIATE SIGNATURE.

# ENV 320-3 - Ethics and the Environment 

Dr. Dai Heide<br>Office: WMC 5655<br>Phone: (778) 782-4806

Course Description: What obligations do we have to the things we encounter in the natural world? We may agree that we humans have obligations to one another - but how extensive are these obligations? And what about other entities? Do we have obligations to future generations? May we do as we please with animals, or do they have significant moral standing? Is the natural world intrinsically morally valuable, or is it simply a means to our human ends?

We will begin with the difficult philosophical task of determining a standard of moral significance. In so doing, we will be compelled to consider a range of arguments in favor of abandoning the anthropocentric view that only humans are intrinsically morally significant. We shall then consider and evaluate a range of views that hold that the natural world is morally significant. Toward the end of the course, we shall consider some of the social and political implications of these views. One significant means of accomplishing these goals shall be close attention to case studies.

Required Text: Holmes and Rolston (eds.), Environmental Ethics: An Anthology. (Blackwell; ISBN: 978-0631222941)

## Assignments, Policies and Grades

Assignments and Grades: Your grade will be determined on the basis of four factors:

1) Three short (one page) response papers ( $25 \%$ )
2) Classroom presentation ( $15 \%$ )
3) Term paper, revised in light of instructor comments on required draft (30\%)
4) Final exam (30\%)

Topics for response papers will be posted on Monday every week beginning in the third week of the term and ending in the $12^{\text {th }}$ week of the term. Response papers are due in class the week they are posted. You are responsible for writing three of them throughout the term and you may pick which weeks you write them.

Classroom presentations will begin several weeks into the term. They will be done in groups - and the size of the group will depend upon decisions we make early in the term. Presentations will have several components. You and your group will research an environmental case study in which an ethical conflict arises. You will circulate to the class the Monday of the week in which you present a brief background to the issue and a brief description of the case study, including a description of the outcome. This is so the rest of the class will be prepared to engage with you during your presentation. Your presentation will involve an analysis of the case study in light of various ethical concepts and theories we have discussed in class.

Term papers will be assigned at a later date and some significant portion of class time will be devoted to discussing how to write a successful term paper. For those of you who are new to philosophy, the earlier you have a look at the following document, the better: http:/ / www.jimpryor.net/teaching/guidelines/writing.html. An electronic copy of a rough draft is required and you are required to turn in a complete draft in order to be
eligible for full credit on the final version of the term paper. I will provide you with electronic comments on your paper in advance of the due date for the final version.

The final exam will cover topics from the entire course and will be largely a written exam. Details about the exam will be covered as we go along.

ADDRESS
8888 UnIVERSITY DRIVE BURNABY BC V5A 156 CANADA

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ATtENTION Duncan Knowler, Jo Hincliffe
TEL
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FROM SUSAN RHODES, Assistant Director, University Curriculum and Institutional Liaison

RE W designation

DATE February 1, 2012

Please be advised that the University Curriculum Office has approved W designation for the new course

ENV 320 Ethics and the Environment

Department of (iecogmphy

| RC:B-123 | T1:1.7.8.782.3321 | Bmati.geog-infoursfu.ca |
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| To: | Duncan Knowler, Associate Dean <br> Chair, FEnv Curriculum Committee |
| :--- | :--- |
| From: | Ivor Winton <br> Chair, Undergraduate Studies Committee, Geography |
| Re: | Curriculum changes, 2012/2013 calendar |
| Date | October 11, 2011 |

Attached please find proposed changes to the Geography curriculum, approved by our Undergraduate Studies Committee and then by the department as a whole at its meeting of September 29, 2011,

Would you please place these proposed changes on the agenda of the next meeting of the FEnv Curriculum Committee?

## Changes to current programs:

~ BA major
~ BA honours
~BA Environmental Specialty major
~ BA Environmental Specialty honours
inauguration of concentrations inauguration of concentrations lower division course deletion; upper division course addition lower division course deletion; upper division course additions; expansion of course choices

# Geography Major Program 

## FROM:

Students must complete 120 units including 45 upper division units.
Transfer students may enter the program without fulfilling all lower division requirements. See the advisor as soon as possible about program entry.

Students should consult with an advisor when formally declaring a geography major, or risk prolonging their program.

## Program Requirements

Students complete 120 units, as specified below.
Lower Division Requirements
Students complete a total of 18 units including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography GEOG 111-3 Earth Systems GEOG 221-3 Economic Geography GEOG 241-3 Social Geography
and one of
GEOG 213-3 Introduction to Geomorphology
GEOG 214-3 Climate and Environment GEOG 215-3 Biogeography
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation GEOG 255-3 Geographical Information Science I

Lpper Division Requirements

Students complete 32 units of 300 and 400 division courses in geography-ineluding at least eight units at the-400-division, and one of the following.

GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
and any courses to fulfill the remaining 13 units to complete the total of 45 upper division units.

## TO:

Students must complete 120 units $_{\perp}$ including 45 upper division units.
Transfer students may enter the program before fulfilling all lower division requirements. See the advisor as soon as possible about program entry.

Students should consult with the advisor when formally declaring a geography major, or risk prolonging their program.

## Program Requirements

Students complete 120 units, as specified below.

## Lower Division Requirements

Students complete a total of 18 units including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography
GEOG 111-3 Earth Systems
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
and one of

GEOG 213-3 Introduction to Geomorphology
GEOG 214-3 Climate and Environment
GEOG 215-3 Biogeography
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I
In addition, GEOG 261-3 is strongly recommended to students who intend to take upper division courses in urban geography.

Upper Division Requirements
Students complete 32 units of 300 and 400 division courses in geography within one of the following two concentrations.

Concentration 1: Society \& Environment
Students choosing this concentration complete two of
GEOG 325-4 Geographies of Consumption
GEOG 362-4 Geography of Urban Built Environments
GEOG 363-4 Urban Planning and Policy
GEOG 377-4 Environmental History
GEOG 381-4 Political Geography
GEOG 382-4 Population Geography
GEOG 386-4 Health Geography
GEOG 387-4 Geography and Gender
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and any three other courses from the full list of 300 level geography courses: and one of

GEOG 420-4 Cultural Geography
GEOG 432-4 Problems in Environmental History
GEOG 440-4 Law and Geography
GEOG 441-4 Cities, Space, and Politics
GEOG 449-4 Environmental Processes and Urban Development
GEOG 486-4 Health Care Geographies
and any one other course from the full list of 400 level geography courses; and any additional courses, in geography and across the University, to complete the required total of 45 upper division units.

## Concentration 2: Resources, Economy, \& Environment

Students choosing this concentration complete two of
GEOG 322-4 World Resources
GEOG 323-4 Industrial Location
GEOG 324-4 Geography of Transportation
GEOG 327-4 Geography of Tourism
GEOG 383-4 Regional Development and Planning I
GEOG 385-4 Agriculture and the Environment
GEOG 389W-4 Nature and Society
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and any three other courses from the full list of 300 level geography courses; and one of

GEOG 422-4 Theories and Practices of Development
GEOG 426-4 Industrial Change and Local Development
GEOG 427-4 Topics in the Geography of Tourism

# GEOG 428-4 World Forests <br> GEOG 444-4 Regional Development and Planning II <br> GEOG 445-4 Resource Planning <br> GEOG 468-4 Society and Environment in China 

and any one other course from the full list of 400 level geography courses; and any additional courses, in geography and across the University, to complete the required total of 45 upper division units.

## Rationale:

The foremost goal is to provide a stronger degree of structure and guidance to majors than has been the case heretofore while not slowing down progress through the major. A few years ago, the Physical Geography BSc program was reorganized by establishing broad curricular streams; this submission completes that process by tackling the [Human] Geography BA program. It is also hoped that this restructuring provides a clearer profile of departmental interests and priorities to non-geographers.

## Geography Honours Program

## FROM:

## Admission Requirements

Program entry requires the approval of the department and an admission GPA of 3.00 .

## Minimum Grade Requirements

To graduate with honours, students must have a grade point average of not less than 3.00.

## Program Requirements

A total of 132 units is required, of which 60 must be at the upper division.
Transfer students may enter the program without fulfilling all lower division requirements. See the advisor as soon as possible about program entry.

Students should consult with an advisor when formally declaring a geography major, or risk prolonging their program.

Lower Division Requirements
Students complete a total of 18 units including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography GEOG 111-3 Earth Systems GEOG 221-3 Economic Geography GEOG 241-3 Social Geography
and one of
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I

## Upper Division Requirements

Students complete 50 units of 300 and 400 division courses in geography,-including atleast eight units at the-400-division, and one of the following.

GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
and bothof
GEOG-301-4 Geographic Ideas and Methodology
GEOG 491-4 Honours Essay

TO:

## Admission Requirements

Program entry requires the approval of the department and an admission GPA of 3.00 .

## Minimum Grade Requirements

To graduate with honours, students must have a grade point average of not less than 3.00.

## Program Requirements

A total of 132 units is required, of which 60 must be at the upper division.
Transfer students may enter the program before fulfiling all lower division requirements. See the advisor as soon as possible about program entry.

Students should consult with the advisor when formally declaring a geography major, or risk prolonging their program.

Lower Division Requirements
Students complete a total of 18 units_ including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography GEOG 111-3 Earth Systems
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
and one of
GEOG 213-3 Introduction to Geomorphology
GEOG 214-3 Climate and Environment
GEOG 215-3 Biogeography
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I
In addition, GEOG 261-3 is strongly recommended to students who intend to take upper division courses in urban geography.

## Upper Division Requirements

Students complete 50 units of 300 and 400 division courses in geography within one of the following two concentrations.

## Concentration 1: Society \& Environment

Students choosing this concentration complete one of

GEOG 300-4 Possible Worlds: The Rise of Geographical Thinking GEOG 301-4 Geographic Ideas and Methodology
and two of
GEOG 325-4 Geographies of Consumption
GEOG 362-4 Geography of Urban Built Environments
GEOG 363-4 Urban Planning and Policy
GEOG 377-4 Environmental History
GEOG 381-4 Political Geography
GEOG 382-4 Population Geography
GEOG 386-4 Health Geography
GEOG 387-4 Geography and Gender
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and any three other courses from the full list of 300 level geography courses; and one of

GEOG 420-4 Cultural Geography
GEOG 432-4 Problems in Environmental History
GEOG 440-4 Law and Geography
GEOG 441-4 Cities, Space, and Politics
GEOG 449-4 Environmental Processes and Urban Development
GEOG 486-4 Health Care Geographies
and
GEOG 491-4 Honours Essay
and any one other course from the full list of 400 level geography courses; and any
further courses to achieve 50 upper division units in geography.

## Concentration 2: Resources, Economy, \& Environment

Students choosing this concentration complete one of
GEOG 300-4 Possible Worlds: The Rise of Geographical Thinking GEOG 301-4 Geographic Ideas and Methodology
and two of
GEOG 322-4 World Resources
GEOG 323-4 Industrial Location
GEOG 324-4 Geography of Transportation
GEOG 327-4 Geography of Tourism
GEOG 383-4 Regional Development and Planning I
GEOG 385-4 Agriculture and the Environment
GEOG 389W-4 Nature and Society
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and any three other courses from the full list of 300 level geography courses;
and one of
GEOG 422-4 Theories and Practices of Development
GEOG 426-4 Industrial Change and Local Development
GEOG 427-4 Topics in the Geography of Tourism
GEOG 428-4 World Forests
GEOG 444-4 Regional Development and Planning II
GEOG 445-4 Resource Planning
GEOG 468-4 Society and Environment in China
and

> GEOG 491-4 Honours Essay
and any one other course from the full list of 400 level geography courses; and any further courses to achieve 50 upper division units in geography.

## Rationale:

The foremost goal is to provide a stronger degree of structure and guidance to majors than has been the case heretofore while not slowing down progress through the major. A few years ago, the Physical Geography BSc program was reorganized by establishing broad curricular streams; this submission completes that process by tackling the [Human] Geography BA program. It is also hoped that this restructuring provides a clearer profile of departmental interests and priorities to non-geographers.

## Geography - Environmental Specialty Major Program

## FROM:

## Program Requirements

Students complete 120 units, as specified below.
Lower Division Requirements
Students complete a total of 24 units, including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography GEOG 111-3 Earth Systems
GEOG 215-3 Biogeography
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I
and the following two trans-disciplinary-core courses
EVSC 200 - 3 Introduction to Environmental-Seience
REM 100-3-Global-Change
Upper Division Requirements
Students complete a minimum total of 32 upper division units, including four of the following core courses

GEOG 322-4 World Resources
GEOG 377-4 Environmental History
GEOG 382-4 Population Geography

GEOG 385-4 Agriculture and the Environment GEOG 389W-4 Nature and Society
REM 311-3 Applied Ecology and Sustainable Environments REM 356-3 Institutional Arrangements for Sustainable Environmental Management

## and one of

GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
and one of
GEOG 351-4 Cartography and Visualization
GEOG 352-4 Spatial Analysis
GEOG 353-4 Remote Sensing
GEOG 355-4 Geographical Information Science II
GEOG 356-4 3D Geovisualization
GEOG 391-4 Qualitative Research Methods
and two of
GEOG 426-4 Industrial Change and Local Development
GEOG 428-4 World Forests
GEOG 429-4 Environment and Inequality
GEOG 432-4 Problems in Environmental History
GEOG 445-4 Resource Planning
GEOG 449-4 Environmental Processes and Urban Development
GEOG 468-4 Society and Environment in China
REM 445-3 Environmental Risk Assessment
REM 471-3 Forest Ecosystem Management
and additional upper division ( 300 and 400 division) units in geography to total the required 32 units minimum

TO:

## Program Requirements

Students complete 120 units, as specified below.

Lower Division Requirements

Students complete a total of $\underline{21}$ units, including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography
GEOG 111-3 Earth Systems
GEOG 215-3 Biogeography
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
REM 100-3 Global Change
and one of
GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I

## Upper Division Requiremerts

Students complete a minimum total of 32 upper division units, including four of the following core courses

GEOG 322-4 World Resources
GEOG 377-4 Environmental History
GEOG 382-4 Population Geography
GEOG 385-4 Agriculture and the Environment
GEOG 389W-4 Nature and Society
REM 311-3 Applied Ecology and Sustainable Environments
REM 356-3 Institutional Arrangements for Sustainable Environmental
Management
and one of
GEOG 311-4 Hydrology

GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and one of
GEOG 351-4 Cartography and Visualization
GEOG 352-4 Spatial Analysis
GEOG 353-4 Remote Sensing
GEOG 355-4 Geographical Information Science II
GEOG 356-4 3D Geovisualization
GEOG 391-4 Qualitative Research Methods
and two of
GEOG 426-4 Industrial Change and Local Development
GEOG 428-4 World Forests
GEOG 429-4 Environment and Inequality
GEOG 432-4 Problems in Environmental History
GEOG 445-4 Resource Planning
GEOG 449-4 Environmental Processes and Urban Development
GEOG 468-4 Society and Environment in China
REM 445-3 Environmental Risk Assessment
REM 471-3 Forest Ecosystem Management
and additional upper division ( 300 and 400 level) units in geography to total the required 32 units minimum.

## Rationale:

~ EVSC 200 has been deleted from the calendar.
~ GEOG 318 is added to the list of Physical Geography courses to increase student choice.

# Geography - Environmental Specialty Honours Program 

## FROM:

## Admission Requirements

Program entry requires the approval of the department and an admission GPA of 3.00 .

## Minimum Grade Requirements

To graduate with honours, students must have a grade point average of not less than 3.00.

## Program Requirements

Students complete 132 units, of which 60 must be at the upper division.

## Lower Division Requiremems

Students complete a total of $\mathbf{2 4}$ units, including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography
GEOG 111-3 Earth Systems
GEOG 215-3 Biogeography
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
and one of
GEOG 251-3 Quantitative Geography GEOG 253-3 Aerial Photographic Interpretation GEOG 255-3 Geographical Information Science I
and the following two trans-disciplinary-core-courses
EVSC 200-3 Introduction to Enviranmental Scionce
REM-100-3-Global-Ghange

## Upper Division Requirements

Students complete a minimum total of 60 upper division units, including four of the following core courses

GEOG 322-4 World Resources
GEOG 377-4 Environmental History
GEOG 382-4 Population Geography
GEOG 385-4 Agriculture and the Environment
GEOG 389W-4 Nature and Society
REM 311-3 Applied Ecology and Sustainable Environments
REM 356-3 Institutional Arrangements for Sustainable Environmental Management
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles GEOG 317-4 Soil Science
and one of
GEOG 351-4 Cartography and Visualization
GEOG 352-4 Spatial Analysis
GEOG 353-4 Remote Sensing
GEOG 355-4 Geographical Information Science II
GEOG 356-4 3D Geovisualization
GEOG 391-4 Qualitative Research Methods
and two of
GEOG 426-4 Industrial Change and Local Development GEOG 428-4 World Forests
GEOG 429-4 Environment and Inequality
GEOG 432-4 Problems in Environmental History
GEOG 445-4 Resource Planning
GEOG 449-4 Environmental Processes and Urban Development

# GEOG 468-4 Society and Environment in China 

## REM 445-3 Environmental Risk Assessment

REM 471-3 Forest Ecosystem Management
and both of
GEOG-301-4 Geographic-Ideas and Methodology
GEOG 491-4 Honours Essay
and any additional 400 division geography units to total 50 upper division units.

TO:

## Admission Requirements

Program entry requires the approval of the department and an admission GPA of 3.00.

## Minimum Grade Requirements

To graduate with honours, students must have a grade point average of not less than 3.00.

## Program Requirements

Students complete 132 units, of which 60 must be at the upper division.
Lower Division Requirements
Students complete a total of $\underline{21}$ units, including all of
GEOG 100-3 Society, Space, Environment: Introducing Human Geography
GEOG 111-3 Earth Systems
GEOG 215-3 Biogeography
GEOG 221-3 Economic Geography
GEOG 241-3 Social Geography
REM 100-3 Global Change
and one of

GEOG 251-3 Quantitative Geography
GEOG 253-3 Aerial Photographic Interpretation
GEOG 255-3 Geographical Information Science I

## Upper Division Requirements

Students complete a minimum total of 60 upper division units, including four of the following core courses

GEOG 322-4 World Resources
GEOG 377-4 Environmental History
GEOG 382-4 Population Geography
GEOG 385-4 Agriculture and the Environment
GEOG 389W-4 Nature and Society
REM 311-3 Applied Ecology and Sustainable Environments
REM 356-3 Institutional Arrangements for Sustainable Environmental Management
and one of
GEOG 300-4 Possible Worlds: The Rise of Geographical Thinking GEOG 301-4 Geographic Ideas and Methodology
and one of
GEOG 311-4 Hydrology
GEOG 312-4 Geography of Natural Hazards
GEOG 313-4 River Geomorphology
GEOG 314-4 Weather and Climate
GEOG 315-4 World Ecosystems
GEOG 316-4 Global Biogeochemical and Water Cycles
GEOG 317-4 Soil Science
GEOG 318-4 Soils in Our Environment
and one of
GEOG 351-4 Cartography and Visualization
GEOG 352-4 Spatial Analysis
GEOG 353-4 Remote Sensing
GEOG 355-4 Geographical Information Science II
GEOG 356-4 3D Geovisualization
GEOG 391-4 Qualitative Research Methods
and two of
GEOG 426-4 Industrial Change and Local Development GEOG 428-4 World Forests
GEOG 429-4 Environment and Inequality
GEOG 432-4 Problems in Environmental History
GEOG 445-4 Resource Planning
GEOG 449-4 Environmental Processes and Urban Development
GEOG 468-4 Society and Environment in China
REM 445-3 Environmental Risk Assessment
REM 471-3 Forest Ecosystem Management
and
GEOG 491-4 Honours Essay
and any additional $\mathbf{3 0 0}$ or 400 level geography units to total 50 upper division units.

Rationale:
~ EVSC 200 has been deleted from the calendar.
~ GEOG 300 is added as an alternative to GEOG 301 to increase student choice - both address the nature of geographical enquiry.
~ GEOG 318 is added to the list of Physical Geography courses to increase student choice.
~ In the matter of additional upper division units to total 50: allowing students to take 3 xx as well as 4 xx courses corrects an undoubted mistake made some years ago. In the most extreme case, a student would currently have to take seven fourth-year courses to graduate. Hercules would have hesitated! The proposed change brings the program back into the realm of the possible. Students will still have to take at least three $4 \times x$ courses.

MEMO

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In response to Jo Hinchliffe's memo of November 21, 2011 regarding temporary withdrawal of courses in the Department of Geography, we have reviewed these courses and propose the following.

## Courses to remain active:

We wish to keep 453 W active as this belongs to a sequence of courses in Remote Sensing [GEOG $253,353,453$ ] - and we have recently hired in that field. Tentatively, the course is scheduled for Spring 2013.

## Courses to be temporarily withdrawn:

We wish to temporarily withdraw two courses on your list but not delete: GEOG 412 and 417 [as opposed to 412 W and 417 W ]. Their existence makes it easier to hire temporary replacements when the relevant faculty members are on leave. (Hiring for a course designated as W is more difficult, sometimes impossible.) Is there any way that such 'paired' courses can be mothballed longer-term rather than short-term?

## Courses to be deleted:

We intend to delete GEOG 250, 263, 391, 429 and 444. GEOG has been waiting to delete in conjunction with proposing new courses - this will be done next term and will need to be approved by the FENV UCC in February.


