



ORIGINAL COURSE IMPLEMENTATION DATE: September 1993
 REVISED COURSE IMPLEMENTATION DATE: September 2017
 COURSE TO BE REVIEWED: (six years after UEC approval) January 2023
 Course outline form version: 09/15/14

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: GEOG 111	Number of Credits: 3 Course credit policy (105)																
Course Full Title: Environmental Issues and Strategies																	
Course Short Title (if title exceeds 30 characters): Environ. Issues & Strategies																	
Faculty: Faculty of Social Sciences	Department (or program if no department): Geography and the Environment																
Calendar Description: Contemporary environmental challenges in a global and local context. Students use citizen science and geographic methods to design a local environmental research project and identify strategies for adaptation. Please refer to the Department of Geography website for out-of-class field trip scheduling information. Note: Field trips outside of class time may be required. Please refer to department website for field trip scheduling information.																	
Prerequisites (or NONE):	None.																
Corequisites (if applicable, or NONE):																	
Pre/corequisites (if applicable, or NONE):																	
Equivalent Courses (cannot be taken for additional credit) Former course code/number: Cross-listed with: Equivalent course(s): <i>Note: Equivalent course(s) should be included in the calendar description by way of a note that students with credit for the equivalent course(s) cannot take this course for further credit.</i>	Transfer Credit Transfer credit already exists: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Transfer credit requested (OREg to submit to BCCAT): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No (if yes, fill in transfer credit form) Resubmit revised outline for articulation: <input type="checkbox"/> Yes <input type="checkbox"/> No To find out how this course transfers, see bctransferguide.ca .																
Total Hours: 45 Typical structure of instructional hours: <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 5px;"> <tr><td>Lecture hours</td><td style="text-align: center;">19</td></tr> <tr><td>Seminars/tutorials/workshops</td><td style="text-align: center;">21</td></tr> <tr><td>Laboratory hours</td><td></td></tr> <tr><td>Field experience hours</td><td style="text-align: center;">5</td></tr> <tr><td>Experiential (practicum, internship, etc.)</td><td></td></tr> <tr><td>Online learning activities</td><td></td></tr> <tr><td>Other contact hours:</td><td></td></tr> <tr><td style="text-align: right;">Total</td><td style="text-align: center;">45</td></tr> </table>	Lecture hours	19	Seminars/tutorials/workshops	21	Laboratory hours		Field experience hours	5	Experiential (practicum, internship, etc.)		Online learning activities		Other contact hours:		Total	45	Special Topics Will the course be offered with different topics? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If yes, different lettered courses may be taken for credit: <input type="checkbox"/> No <input type="checkbox"/> Yes, repeat(s) <input type="checkbox"/> Yes, no limit <i>Note: The specific topic will be recorded when offered.</i>
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Seminars/tutorials/workshops	21																
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Online learning activities																	
Other contact hours:																	
Total	45																
Maximum enrolment (for information only): 36 Expected frequency of course offerings (every semester, annually, every other year, etc.): every semester																	
Department / Program Head or Director: Steve Marsh	Date approved: March 24, 2016																
Faculty Council approval	Date approved: November 2016																
Campus-Wide Consultation (CWC)	Date of posting: December 9, 2016																
Dean/Associate VP: Jacqueline Nolte	Date approved: November 2016																
Undergraduate Education Committee (UEC) approval	Date of meeting: January 27, 2017																

Learning Outcomes

Upon successful completion of this course, students will be able to:

- Discuss relationships between global environmental change and population, urbanization, and agriculture;
- Provide written comparison of western scientific approaches to traditional ecological knowledge accumulation;
- Identify the relative utility and effectiveness of different scientific and social scientific data collection techniques in developing an environmental research project;
- Reflect on the ethical issues associated with the collection, analysis, and utilization of data, including Traditional Ecological Knowledge.
- Integrate field observations and data collection into a group project and individual reflection on local environmental change.
- Utilize both social science and natural science approaches in written, oral, and visual explanation of environmental problems.
- Work collaboratively to use scientific analysis and observations of human use patterns in order to identify and advocate strategies for improving environmental sustainability at a local scale.

Prior Learning Assessment and Recognition (PLAR)

Yes No, PLAR cannot be awarded for this course because

Typical Instructional Methods (guest lecturers, presentations, online instruction, field trips, etc.; may vary at department's discretion)

Problem-based learning, lectures, in-class seminar exercises and fieldwork, student presentations.

Grading system: Letter Grades: Credit/No Credit: Labs to be scheduled independent of lecture hours: Yes No

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Typical Text(s) and Resource Materials (if more space is required, download Supplemental Texts and Resource Materials form)

Author (surname, initials)	Title (article, book, journal, etc.)	Current ed.	Publisher	Year
1. Molles, M., and B. Borrell	Environment: Science, Issues, Solutions	<input checked="" type="checkbox"/>	WH Freeman and Co.	2016
2. Govt of BC	BC Food and Agriculture Climate Action Adaptation, Risk, and Opportunity Assessment Series	<input type="checkbox"/>	Queen's Printer	2012
3. Turner, N. and H. Clifton	'It's so different today': Climate change and Indigenous lifeways in British Columbia, Canada. <i>Global Environmental Change</i> 19 (2).	<input type="checkbox"/>	Journal	2009
4. Nature Magazine Editorial Board	The Rise of the Citizen Scientist. <i>Nature</i> August 18	<input type="checkbox"/>	Journal	2015

Typical Evaluation Methods and Weighting

Quizzes/tests:	20%	Seminar Discussion and Exercises:	10%	Reflective Essay	10%
Ind. Essay:	30%	Group Project:	30%	Total:	100%

Details (if necessary):

Reflective Essay 10%

Seminar Discussion and Exercises 10%

Citizen Science Group Project on Climate Challenge Adaptation 30%

Individual Essay: neighbourhood level climate adaptation assessment 30%

Quizzes (5-6): 20%

Typical Course Content and Topics

1. Introduction to course, key concepts: climate change, vulnerability, risk, and adaptation
2. The science of climate change; the hydrological cycle; invasive species
3. Bioregionalism; social connectivity and capacity for change
4. BC population histories and suburban environmental change
5. Science and uncertainty; risk analysis; field techniques and ethics in data collection
6. Mapping change: GIS and citizen science activism; mapping lab
7. Water forecasting and pollution; field techniques
8. Sustainable development; field techniques
9. Food security; thesis statement development
10. Food production and farm-level adaptation to climate changes
11. Traditional ecological knowledge and climate adaptability
12. Urbanization, infrastructure, and climate preparedness
13. Greening the city from the inside out
14. Group presentations; summary of course themes and ideas