University of Guelph  
Department of Geography, Environment and Geomatics  
GEOG 3020: Global Environmental Change  
Fall 2018

Instructor  
Lucy Sportza, PhD  
Office Hours: Tu/Th. 1-1:30 & Th 4-5 Hutt 240c  
Email: lusportz@uoguelph.ca

Teaching Assistant  
TBD

Course Description:
This course examines the human/social dimensions of global environmental change (GEC), i.e., how we influence and how we are impacted by environmental changes that are occurring at the global scale. The course focuses on the issue of climate change but we also discuss other kinds of global environmental change. The emphasis is on the tools, techniques, and concepts that will help us build resilient communities and economies in the face of unprecedented environmental change.

In part one of the course, we will explore the scale and extent of human impact on GEC with particular emphasis on the state of knowledge about human-induced climate change. In part two, we will explore the impacts of GEC on society and how to identify and assess the social and biophysical factors that magnify the vulnerability of a given region to ongoing GEC, with emphasis on the factors that shape vulnerability unevenly across geographic regions and social groups. We will also review some of the policies and technologies that are being used to respond to GEC, and think about the principles of effective adaptation strategies. In part three, students will apply their learnings to a group assignment where they will go through the steps of conducting a vulnerability assessment and designing an effective adaptation strategy.

Learning Outcomes
1. Articulate the processes through which local actions have global influence, and vice versa.
2. Identify the environmental and political-economic factors that increase the vulnerability of a community or a region to global environmental change and assess appropriate policy and technology responses.
3. Develop your skills in the art and science of ‘conceptual modeling’ and knowledge synthesis.
4. Develop your knowledge mobilization skills, i.e., the ability to persuasively and succinctly express evidence-based information, arguments and critical analyses accurately and reliably and in a manner appropriate to your audience.
5. Become more comfortable with ambiguity in the process of undertaking interdisciplinary, issue-oriented research.
**Course Materials:**


*Other readings will be distributed via Courselink.

**Schedule (Subject to change – EXCEPT due dates/dates of quizzes, which are firm). Changes will be announced in class and posted on Courselink.**

<table>
<thead>
<tr>
<th>Dates</th>
<th>Tuesday</th>
<th>Thursday</th>
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<tbody>
<tr>
<td>Week 1 6 Sept.</td>
<td>Course Introduction, TopHat, what makes environmental change “global” and other definitions</td>
<td>Course Introduction, TopHat, what makes environmental change “global” and other definitions</td>
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<td>Reading: the Outline!!</td>
<td>Reading: the Outline!!</td>
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<tr>
<td>Week 1 11, 13 Sept.</td>
<td>Anthropocene Required reading: Waters et al., 2016; Smil, 2015</td>
<td>About Assignments (Blogs) Climate change – when is it “dangerous”?</td>
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<td>Reading: by the first quiz (week 5), you will need to read chapters 1, 3-7 of Leichenko and O’Brien, so start now!</td>
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<td>Week 2 18, 20 Sept.</td>
<td>“Double exposures”, teleconnected world, understanding vulnerability, adaptation, adaptive capacity Reading: Leichenko and O’Brien</td>
<td>“Double exposures”, etc. continued</td>
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<td>Week 3 25, 27 Sept.</td>
<td>Same as last week Reading: Leichenko and O’Brien</td>
<td>Same as last week Blog 1 due (Thursday, 27 Sept., 2:00 pm) (15%)</td>
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<td>Week 4 2, 4 Oct.</td>
<td>Guest lecture: Dr Barry Smit</td>
<td>Catch up/case study, Quiz Review</td>
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<td>Week 5 9, 11 Oct.</td>
<td>No class (midterm break)</td>
<td>Quiz 1 (In class, Thursday, 11 Oct. 15%) Quiz will cover all material to date, including Dr Smit’s guest lecture</td>
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<td>Week 6 16, 18 Oct.</td>
<td>Cities and climate change Group project Reading: Assignment summary (read it before class!)</td>
<td>Group Project workshop and Project Charter Groups will have an opportunity to start working on their charter</td>
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<td>Week 7 23, 25 Oct.</td>
<td>Team meetings/work period – in class Project charter due (Tuesday, 23 Oct., 6:00 pm)</td>
<td>Cities and climate change, again Blog 2 due (Thursday, 25 Oct., 2:00 pm) (15%)</td>
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<td>Week 8* 30 Oct., 1 Nov.</td>
<td>Case study: Cambodia &amp; team meetings</td>
<td>Case study, con’t &amp; team meetings</td>
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<td>Week 9 6, 8 Nov.</td>
<td>Agriculture and climate change Team meetings</td>
<td>Forestry and climate change Team meetings</td>
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<tr>
<td>Week 10 13, 15 Nov.</td>
<td>GEC, Indigenous peoples, and the Arctic Team meetings</td>
<td>Team meetings</td>
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**Course Assignments**

*In-Class Test [2 x 15% = 30%]*: Tests will include multiple choice and short answer questions. Students should strive to understand, not memorize, course material.

*Group project: Strategic Planning for Global Environmental Change [25%]*: Each group (approximately 6 per group) will be assigned a Canadian urban area at random and will conduct a preliminary vulnerability assessment and adaptation strategy for that area based on secondary data and information. Class time set aside to work with your group and the instructor (see schedule – “team meetings”) to ensure you are on track and understand the expectations.

*Blog posts [2 x 15% = 30%]*: The blog posts are short (900-1100 words) writing assignments. This is your opportunity to practice and demonstrate effective writing skills.

*Participation (and, consequently, attendance) [10%]*: This will be tracked by way of monitoring responses to questions posed in-class through the TopHat interactive platform.

*Group project self/peer-evaluation [5%]*: Each student will be asked to rate the contributions they and their team members made to the overall project and to provide a brief explanation for the ratings.

**NOTE**: Keep paper and/or other reliable back-up copies of all out-of-class assignments. You may be asked to resubmit work at any time.

Final grades will be classified as follows:

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<th>Grade</th>
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<th>Grade</th>
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<tbody>
<tr>
<td>A+</td>
<td>100</td>
<td>B+</td>
<td>77-79</td>
<td>C+</td>
<td>67-69</td>
<td>D+</td>
<td>57-59</td>
<td>F</td>
<td>0-49</td>
</tr>
<tr>
<td>A</td>
<td>85-89</td>
<td>B</td>
<td>73-76</td>
<td>C</td>
<td>63-66</td>
<td>D</td>
<td>53-56</td>
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<tr>
<td>A-</td>
<td>80-84</td>
<td>B-</td>
<td>70-72</td>
<td>C-</td>
<td>60-62</td>
<td>D-</td>
<td>50-52</td>
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Grades are assessed according the classifications published in the undergraduate calendar: [https://www.uoguelph.ca/registrar/calendars/undergraduate/2018-2019/c08/c08-grds-proc.shtml](https://www.uoguelph.ca/registrar/calendars/undergraduate/2018-2019/c08/c08-grds-proc.shtml)

**Top Hat Teaching Platform**

As a way to facilitate engagement in a large class setting, this class will use the Top Hat teaching platform. You will find it at https://tophat.com/. This platform allows an instructor to pose questions...
to the group, and to summarize and visualize responses. Students respond to questions through their cell phone, tablet, or laptop. The instructor will use Top Hat to assign participation grades for the course.

Students enrolled in the course will received an invitation to join Top Hat. If you have enrolled late and did not receive an invitation, please ensure that you seek direction on how to sign up. There is a cost associated with this platform, but it is relatively cheap and the cost matches the value students will derive from this. If you are having any issues with this platform, please see the course instructor. Note that the platform requires you to bring a digital device to class (cell phone, tablet, laptop). If you do not own one of these devices, or feel comfortable bringing it to class, then please see the instructor.

General Policy on Late Assignments / Make-up Tests

All writing assignments are to be submitted via their appropriate CourseLink dropbox. Late assignments are subject to a 10% penalty per-day, beginning at the exact time of the due date, and will not be accepted (i.e., will receive a grade of 0) after three full days. Begin your writing assignments early so that you have plenty of time to organize your submissions to the CourseLink dropbox and be sure you are submitting the proper document! You will automatically receive confirmation that you submitted a file; retain this (and, if you like, take a screenshot showing you submitted a file, with the date and time) as proof.

Students are expected to make every effort to meet deadlines. That said, when you find yourself unable to meet a deadline because of illness or compassionate reasons, please inform the course instructor email or in person immediately, prior to the due date of a given assignment. We are only able to make accommodations if we are aware of your situation, so please keep the lines of communication open as early and often as possible. You may be asked to provide documentation.

Make-up tests will only be made available in the event of illness or some other legitimate and verifiable emergency. The make-up time and location will be determined between the instructor / TA and the student(s).

When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

E-mail Communication

As per university regulations, all students are required to check their <mail.uoguelph.ca> e-mail account regularly: e-mail is the official route of communication between the University and its students.

Turnitin Originality Check
In this course, your instructor will be using Turnitin, integrated with the CourseLink Dropbox tool, to detect possible plagiarism, unauthorized collaboration or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph.

All individual assignments submitted to the Dropbox tool will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site.

A major benefit of using Turnitin is that you will be able to educate and empower yourself in preventing academic misconduct. In this course, you may screen your own assignments through Turnitin as many times as you wish before the due date. You will be able to see and print reports that show you exactly where you have properly and improperly referenced the outside sources and materials in your assignment.

Drop Date
Courses that are one semester long must be dropped by the end of the fortieth class day, **Friday November 2, 2018**. The regulations and procedures for Dropping Courses are available in the Undergraduate Calendar.

Copies of out-of-class assignments
Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

Accessibility
The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

Academic Misconduct
The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University’s policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students
need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar.

Recording of Materials
Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Resources
The Academic Calendars are the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.