HUMAN IMPACT ON THE ENVIRONMENT

GEOG*1220 | Fall 2020

Department of Geography, Environment and Geomatics | University of Guelph



Image: Guelph Lake. Source: Wikimedia.

This course provides foundational understanding in the societal dimensions and drivers of environmental issues. Our goal is to understand how some of the world's most pressing environmental issues - climate change, biodiversity loss, water pollution, and so on - have their roots in human institutions, decisions, and culture/worldviews. We will achieve this goal by integrating perspectives from environmental <u>and</u> social sciences.

The course is best described in three parts. First, we review basic concepts that will help us to think about, or conceptualize, human-environment relationships and human impact on environment. Second, we will explore a range of key issues around resource use and environmental degradation, with particular emphasis on food, energy, and water systems. Third, we will consider some of the strategies that can be pursued in order to reduce human impact on environment; here, we provide an introduction to ideas in environmental governance and environmental justice. Throughout the course we will contrast issues and management approaches in various countries around the world, but with emphasis on Canadian and North American examples.

Course Organization

- Eight 12 minute mini-lectures recorded and posted to CourseLink each week
- One live session of activities, Q&A, and guest lectures per week (Friday 1:30-2:20p) via Courselink Zoom

| | | | Office Hours | Student Group |
|------------|-------------------|----------------------|---|---------------|
| Instructor | Dr. Eric Nost | enost@uoguelph.ca | MW 1:30-2:30 via Courselink Zoom | |
| | Caroline Beninger | beninger@uoguelph.ca | | |
| Teaching | Gideon Binobo | gbinobo@uoguelph.ca | | |
| Assistants | Emmanuel Tamufor | etamufor@uoguelph.ca | | |
| | TBD | | | |



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Learning Outcomes

By the end of this course, you will be able to:

- Identify societal drivers of environmental change
- Evaluate different ways human impacts on the environment are theorized
- Identify and explain different approaches to managing human impacts on environment
- Synthesize diverse sources of knowledge to communicate to varied audiences about real-world, place-based environmental issues

Textbook & Resources

Withgott, J., Laposata, M. and Murck, M. (2018) *Environment: The Science Behind the Stories*, 3rd Custom Edition, Toronto: Pearson. *REQUIRED*.

- You must purchase the textbook and access to the Mastering and Learning Catalytics platforms. We will use these for quizzes, polls, and other interactive assignments that will facilitate our learning. A new hardcopy of the textbook automatically comes with access to these platforms.
- The eText version also automatically gives you access to these platforms. You can get the eText through <u>the bookstore</u> or Pearson. Please note that the eText has different page and chapter numbering than the print copy. That's totally fine! It just means you need to pay close attention to the schedule below and ensure you're reading what you need to be.
- If you buy the book used, you will need to purchase both Mastering and Learning Catalytics separately (\$62; further details provided in class).
- **Bottomline**: the eText version is the best deal!



GEOGRAPHY, ENVIRONMENT IMPROVE LIFE **GEOMATICS** 1220 – Human Impact on the Environment | Fall 2020

| | EK # LECTURE TOPIC | READINGS | | | |
|--------------------------|--------------------|---|--|--|--|
| WEEK | # | | Hardcopy | eText version | ASSIGNMENTS |
| Sept 11 | 0 | Welcome! | | | <mark>Test Zoom</mark> |
| Sept 14 | 1 | Are we in the age of Anthropocene? The science behind the stories | Chapter 2 (Earth Systems) Chapter 16 (Anthropocene) pgs. 510-518 | Chapter 3 (Earth Systems) Chapter 16 (Anthropocene) pgs. 510-518 (available on Mastering) | |
| Sept 21 | 2 | What factors shape human impact on environment? IPAT and beyond | Chapter 1: pgs. 3-16 ("Our Island, Earth" to end of "Ecological Footprints") Chapter 15 (Environmental Ethics and Economics) | Chapter 1: pgs. 3-16 ("Our Island, Earth" to end of "Ecological Footprints") Chapter 20 (Environmental Ethics and Economics) | |
| Sept 28 | 3 | Common Earth and collective action: Overview of environmental governance | Supplemental Chapter 21 (Environmental Management) (available on Mastering) | Chapter 21 (Environmental Management) | <mark>Research Journal</mark> <mark>#1 Due</mark> |
| Oct 5 | 4 | Oceans and fisheries: common pool resources | Chapter 10 (Coastal Systems and Fisheries) | Chapter 12 (Coastal Systems and Fisheries) | |
| Oct 12 (Thanksgiving) | 5 | First half recap and catch-up | | | |



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| WEEK # | | LECTURE TOPIC | READINGS | | |
|--------|----|--|--|---|--|
| VVEEN | # | | Hardcopy | eText version | ASSIGNMENTS |
| Oct 19 | 6 | Water everywhere and not a drop to drink? The hydrological cycle as a social system | Chapter 9 (Freshwater Systems) | Chapter 11 (Freshwater Systems) | |
| Oct 26 | | Producing edible environments: connecting our food choices to the landscapes around us | Chapter 5 (Soil Resources, from "Soil is an important terrestrial reservoir of carbon" to end of the chapter) | Chapter 7 (Soil Resources, from "Soil is an important terrestrial reservoir of carbon" to end of the chapter) | <mark>Research Journal</mark> <mark>#2 Due</mark> |
| | | | Chapter 6 (Agriculture & Food) | Chapter 8 (Agriculture & Food) | |
| | | Reformulating Earth's systems to satisfy | Chapter 12 (Fossil Fuels) | Chapter 15 (Fossil Fuels) | |
| Nov 2 | × | our energy demands: past, present and future (PART 1: Upstream impacts) | Chapter 13 (Energy Alternatives) | Chapter 16 (Energy Alternatives) | |
| Nov 9 | 9 | Reformulating Earth's systems to satisfy our energy demands: past, present and future (PART 2: Downstream impacts) | Chapter 11 (Air Pollution) | Chapter 13 (Air Pollution) | |
| | | | Chapter 14 (Waste) | Chapter 18 (Waste) | |
| Nov 16 | 10 | From e-waste to plastic pollution: environmental implications of the changing fabric of everyday life | Review Chapter 15 (Environmental Ethics, section on "environmental justice") | Review Chapter 20 (Environmental Ethics, section on "environmental justice") | |
| Nov 23 | 11 | 'Kinds' of environments: what should nature look like? | Chapter 7 (Conservation): 196- 220 | Chapter 9 (Conservation): 254-278 | Research Journal #3 Due |



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| WEEK | WEEK # LECTURE TOPIC | | READINGS | | |
|--------|-----------------------------------|---------------|--|---|--|
| VVEEN | | Hardcopy | eText version | ASSIGNMENTS | |
| | | | Chapter 8 (Forests): 232-251 | Chapter 10 (Forests): 290- | |
| | | | Review Chapter 15 | 309 | |
| | | | (Environmental Economics): pgs. 474-486 | Review Chapter 20 (Environmental Economics): pgs. 632-644 | |
| Nov 30 | 12 | Course review | | | |
| | Submit Exam by Monday Dec 14, 5pm | | | | |



GEOGRAPHY, ENVIRONMENT

Methods of Evaluation

| Assignment | Deadline | Weight |
|---|--|--------|
| Quizzes and Participation – you will be graded on your best 10 live | 10 Friday live sessions | 20% |
| sessions and/or weekly quizzes | Live sessions will help us create a community and learn by doing: demos, "hands-on" activities, and guest lectures. For each session, you will be assessed on your answers to polls in the Learning Catalytics platform. Assessment will be half correctness, half completion. 10 weekly quizzes Each week I will deliver ~10-20 minutes worth of questions to you through the Mastering platform. You can take these quizzes on your own time. They will provide you with timely feedback and keep | |
| Research Journal Entries – see below | you on track with the readings. Weeks 3, 7, and 11 (Friday, by 5pm) | |
| for further detail | Throughout the course, you will turn in a series of short "journal entries" that will help you write the research brief for the takehome exam. See below for more detail. | 45% |
| Exam (takehome) | Monday, December 14, by 5pm The exam consists of two parts: (20%) The first is designed to take 1 hour and will consist of multiple choice questions, as well as a few short answer questions. You will be able to take it on your own time through the Mastering platform. Questions will be inclusive of the entire course. (15%) In the second, you'll synthesize the work you've done in your journal entries and write a research brief. | 35% |

Research Journal Entries

Please take note: you will receive more detailed instructions for the assignments in follow-up documents.

For each journal entry, you will complete an annotated bibliography of 1 peer-reviewed scholarly article and 1 other source, and write a 1 paragraph synthesis. For Journal Entry #3, you will specifically review a documentary, film, or podcast that explores your chosen human impact on the environment.



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The journal entries and takehome exam must be submitted on time to the relevant section of Courselink. Late assignments will be penalized at the rate of 10% per day, and will not be accepted (i.e., will receive a grade of 0) after five days. Students whose assignment is late because of valid medical reason, family emergency, or other reason accepted by the course instructor will not be penalized. 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.

Asking for Help

- 1. Check here! (the course outline)
- 2. Ask me (Prof Nost) on Courselink Discussion Boards your peers may benefit from clarification
- 4. Check the "Get Assistance" link from the Library: http://www.lib.uoguelph.ca/get-assistance
- 5. Attend your TA's office hours
- 6. Attend my office hours, email me

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.

Teaching Platforms

Through the **Mastering** platform, you will be provided with a set of virtual homework assignments that you can complete to ensure your steady progression through the course.

In addition, as a way to facilitate engagement in a large class setting, this class will use the **Learning Catalytics** teaching platform. This platform allows an instructor to pose questions to the group, and to summarize and visualize responses. We will use this during Friday live sessions and <u>participation grades</u> for the course will be based in part on it.

There is a cost associated with Mastering and Learning Catalytics, but they are relatively cheap, come bundled with the hardcopy and eText versions of the textbook, and the cost matches the value you will derive from these tools.

Pearson Technical Support Virtual Office Hours

For issues directly related to Mastering please join one of the two Zoom links listed below on the following dates. Please note students will be admitted into the Zoom chat one at a time, so we ask you to be patient and will be sure to speak to everyone who is in the waiting room.

Friday September 11th from 1:00pm-2:00pm Friday September 18th from 2:30pm – 3:30pm Friday September 25th from 12:00pm- 1:00pm

Andrea - https://zoom.us/j/7934645583?pwd=T3IvbER5ZmcvNVNiejNQUm1BOVJxdz09 Taylor - https://pearson.zoom.us/j/9277259675?pwd=bDBoWkF2MHV0RmN3WW5IamgrdERuZz09

Outside of these office hours, your best (and quickest) path to resolve technical issues is to contact technical support (https://support.pearson.com/getsupport/s/contactsupport). They have access to your user account and can quickly see what might be going on.



When you contact them please include the following information:

- 1. Your username
- 2. OS (Windows or Mac)
- 3. Browser (preferred browser is Chrome)
- 4. Exactly what you are trying to open.
- 5. Error message (if any) that appears when you try to open it.
- 6. Tell them your course is integrated into a D2L platform



GEOGRAPHY, ENVIRONMENT

What you can expect from me

- To help you not only understand but get excited about the material, learning as much as possible! We're all coming from different perspectives and starting points, meaning that it is everyone's responsibility, but especially mine, to work to provide a respectful and engaging learning environment. I'm here to work with you from where you are and build up your understanding of the course content.
- To provide prompt feedback on assignments.
- To give you a sense of the flow of the semester when the assignment load will be heavier, so that you can prepare appropriately.
- To assist in developing your critical analysis and communication skills, through our assignments. These are skills that will be useful to you in both your chosen profession and as a citizen.
- To advise you on future coursework, jobs, grad school, and/or volunteering opportunities.

What I expect of you

- To treat each other with respect. Our classroom is a safe space for all students, regardless of sex, gender, race, ethnicity, religion, age, sexual orientation, political orientation, nationality, ability or disability. Every person is welcome here.
- To communicate with me about what you expect from the course, what you need, and your challenges.
- To put your best possible effort into this class.

A brief Q&A

Q: How do I contact you?

A: Email is best. I will check it often during weekdays until 6pm, and occasionally in the evenings and weekends. I will respond to your requests and questions as soon as I can. Please do not count on an immediate response, especially for important last minute questions regarding assignments.

Q: I'm confused about the material--what should I do?

A: First off, don't feel embarrassed—few scholars, whether undergraduates or tenured professors understand everything completely the first time! Please bring your questions to class! If you are confused, it's likely that your classmates are, too. If you bring me questions, it helps me evaluate how best to help you learn the material. If you are still confused, please come to my office hours. I am glad to help!

Q: I have to miss lecture or an exam/lab for a family/personal/medical emergency. What should I do? A: As soon as possible, get in touch – with me (Prof Nost) concerning the exam, or with your TA if it concerns an assignment.

Q: I'm not happy about my exam/lab grade. Will you change it?

A: For regrades, we reserve the right to either increase OR decrease your grade depending on what we find in regrading. For a regrade, wait 24 hours, then email a written description of why you deserve a better grade to: your TA (assignments) or me (exam).



Counselling Services

The University of Guelph can be a challenging environment. Counselling Services provides a wide range of strategies to help you do your best during your time here at UofG. At Counselling Services you can find help with everything from Stress Management, to Academic Support, to Mental Health, to Emergencies/Crisis Mitigation. For more information about their services or to book an appointment, please call them at (519) 824-4120 ext.53244, visit them in University Centre - Level 3 South, or visit their website.



University of Guelph Policy Statements

GEOGRAPHY, ENVIRONMENT

Disclaimer

Please note that the ongoing COVID-19 pandemic may necessitate a revision of the format of course offerings and academic schedules. Any such changes will be announced via CourseLink and/or class email. All University-wide decisions will be posted on the COVID-19 website and circulated by email.

Illness

The University will not require verification of illness (doctor's notes) for the fall 2020 or winter 2021 semesters.

E-mail Communication

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

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 (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. See the undergraduate calendar for information on regulations and procedures for Academic Consideration.

Drop Date

Courses that are one semester long must be dropped by the end of the last day of classes; two-semester courses must be dropped by the last day of classes in the second semester. The regulations and procedures for <u>Dropping Courses</u> 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





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.

<u>Resources</u>

The <u>Academic Calendars</u> are the source of information about the University of Guelph's procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.