

University of Guelph
Department of Geography, Environment & Geomatics
GEOG*1350 – EARTH: HAZARDS AND GLOBAL CHANGE– CREDIT WEIGHT 0.5

FALL 2024 – Lectures MWF 3:30pm-4:20pm, ALEX 200

Instructor: Dr. Laura Brown (pronouns: she/her/hers),

Email: laura@uoguelph.ca

Office Hours: See CourseLink for details

GTAs: See CourseLink for details

Prerequisites: None

Calendar Description

“This course investigates physical aspects of natural hazards that affect people and society and will focus on the natural systems and processes that cause climate variability and change, floods, earthquakes, volcanoes, landslides, hurricanes, tornados and other natural disasters.”

Overview

This course investigates the components and processes that contribute to naturally hazardous environments. We will focus on the forces and processes driven by internal and external sources of energy that cause floods, earthquakes, volcanoes, landslides, hurricanes, tornadoes and other natural disasters. The course includes a discussion of significant events in the geologic past, the historical record, and future hazard potential. We examine how Geographers are working toward understanding these hazards and developing strategies for mitigation and adaptation. We look at the risks humans face in different regions, including hazards exposure, our contribution to natural hazards, and how we can minimize and cope with future events.

Learning Outcomes

Learning Outcomes are defined the university, program, major and course level. In our course, the Learning Outcomes are achieved through course design, activities and assessment. Learning Outcomes are our broad goals for this course or ‘the things you should *know* once you’ve completed the course’ are listed here. If you have any questions or concerns about this, please don’t hesitate to discuss this with me.

Specifically, in this course, students will:

- Develop a comprehensive *depth and breadth of understanding* of the core concepts and principles that result in natural hazards.

- Recognize the human factors that contribute to disasters triggered by natural hazards
- Illustrate an in-depth knowledge of two chosen natural hazards by creating a story and case study
- Critically and *independently* recognize, synthesize and evaluate diverse sources of knowledge, arguments and approaches pertinent to exploring elements of geoscientific problems
 - Investigate complex real-world events and the challenges communities face coping with hazardous events using appropriate concepts, methods, and tools from the geographical sub-disciplines.
 - Recognize and identify the societal relevance of geographical knowledge and apply it to real-world human-environment issues.

For more information on Learning Outcomes see the following links: [University of Guelph, learning outcomes](#) and [Geography, learning outcomes](#)

Evaluation

The final grade will be assessed from weekly review quizzes completed online (10%), two group assignments (35%), and a midterm (25%) and final exam (30%). Quizzes are based on information presented and discussed in lectures and assigned readings. In summary:

| | | |
|--------------------------------|-----|------------------|
| Weekly Review Quizzes (online) | 10% | Starting Sept 13 |
| Assignment 1 | 15% | Due Oct. 17 |
| Assignment 2 | 20% | Due Nov. 13 |
| Midterm | 25% | Oct. 21 |
| Final Exam (cumulative) | 30% | Dec. 6 |

Failure to pass the midterm and/or final may result in failure in the course

Students with a documented conflict for any assignment, quiz, midterm, or final exam need to **see me at least two weeks prior** to arrange an alternative time, there is no guarantee that this will be accommodated, but ensuring that you address the issue several weeks in advance will certainly assist the process. Please review the policies on extension requests and grading for additional information.

Weekly Review Quizzes – worth 10%, completed online Starting Sept. 13, 2024

The weekly review quizzes are an incredible opportunity for students to review and ‘test’ themselves on the relevant material relatively frequently. These quizzes are worth 10% of the final grade in the class. They are used partly to incentivize engagement with the course material one more time. So, if you read the assigned readings before participating in lectures, take helpful notes from the reading and class material, and review your notes each week, that is approximately five points of engagement with the material. Adding the quiz makes it six points. I think these points of engagement with the material are vital to an in-depth and comprehensive understanding of complex concepts in GEOG*1350. So, the quizzes might feel

like extra work – and they should – because the whole point was to get you to engage with the material one more time.

Furthermore, the quiz questions help me to gauge student comprehension and usually reflect the most important or challenging ideas and concepts covered during that week. Finally, if you need one more reason to pay attention to them, quiz questions also often appear on exams.

The lowest three quiz grades are dropped before the Quiz component of your final grade is calculated. I do this to cover instances where quizzes are missed due to losing track of time and missing the deadline, computer or internet issues, or illness. Therefore, **there are no extensions or second attempts**. If you do all your quizzes, then the lowest three scores are dropped, so you have an opportunity to identify concepts or ideas that need further work to understand without it affecting your final grade.

The quizzes are available from Friday at 7:00PM to the following Monday at 1:00 PM.

Assignments – worth 35% total

These are **group assignments** that allow you to demonstrate to us that you understand key concepts. Therefore, AI (e.g. ChatGPT) is not allowed. More details about the assignments will be presented in class and on CourseLink.

Your assignments must be submitted as a **PDF** uploaded to Dropbox on CourseLink. Late assignments (without prior written approval by your GTA) will be penalized at **10%** of the assignment's value per day or part thereof. This course uses Turnitin to help encourage academic integrity.

Extensions must be requested in advance and evaluated case-by-case. Additional detailed information on [assignments, midterms, final exam Instructor or Department Policy on Late or Missed Assignments](#) is available in the Undergraduate Calendar.

Assignment 1 is worth 15% of your final grade and is due before midnight on Oct. 17.

Assignment 2 is worth 20% of your final grade and is due before midnight on Nov. 13. Your GTA handles all Assignment grading questions and grading.

Exams- worth 55% total, completed online

Both the midterm and the final exams are delivered online. These are **not** open-book or open-internet exams. The midterm covers the material from the first 6 weeks of the course. The final exam covers all 12 weeks of the course. More information on both exams will be provided in class.

Organization

There will be three lectures, with some class time used for introduction or review of assignments. This class is being offered as a HYFLEX course, so you can attend in person, ALEX 200, or online via Zoom. If you attend online, I will let students into class at 3:30; if you sign in late, you will not be admitted. Recordings of each class will be posted on CourseLink.

CourseLink Page, UofG Email/ID and Lecture Materials (notes & recordings)

There is a course webpage on CourseLink (the Learning Management System (LMS) used at the University of Guelph). To access this resource, use your central account ID and password. This is the same login ID and password used to access your University of Guelph email and WebAdvisor. CourseLink can be accessed from the University's homepage. You need to check into CourseLink regularly (4-5 times a week) to be successful in this course.

Lecture slides are available on CourseLink as pdf files. These are *OUTLINE* slides; attendance during lectures benefits your overall comprehension of the material – plus fun stuff happens at lectures!

The Zoom link for the lectures and cloud recordings are available via CourseLink.

Following university regulations, all e-mail correspondence will be sent to your University of Guelph e-mail address. I usually respond to student inquiries within 48 hours during University Business hours. I do not reply to messages on weekends or from **off-campus e-mail addresses** because they are often spam or phishing scams. Remember that this is a professional environment; your messages should reflect this. For example, I do not typically answer e-mails that begin with “Hey,” or “Yo Prof”.

Required Textbook

Brown, L.J., Cockburn, J., Dastrup, R.A; & Earle, S. (2022) ***Canadian Physical Geography Perspectives on Natural Hazards, Climate Variability and Change***. University of Guelph, Pressbooks.

<https://books.lib.uoguelph.ca/canadiannaturalhazardsclimatechange/>

This textbook is an Open Educational Resource (OER) developed specifically for this course. It is free and publicly available. The link to this textbook can be found on CourseLink.

Turnitin

In this course, we will be using Turnitin integrated with the CourseLink Dropbox tool to detect potential plagiarism, unauthorized collaboration, and/or copying as part of the ongoing efforts to maintain academic integrity at the University of Guelph. All materials submitted to the Dropbox will be included as source documents in the Turnitin.com reference database solely to detect inappropriate use. Use of the Turnitin.com service is subject to the Usage Policy posted on the Turnitin.com site. A significant benefit of using Turnitin is that students can educate and empower themselves to prevent academic misconduct. In this course, you may screen your assignments through Turnitin as many times as you wish before the due date. You can see and print reports showing exactly where you have properly and improperly referenced outside source and materials in your assignment. Please contact me if you have questions or concerns about this software.

Planned Overview of Course Content and Organization

subject to change as the semester progresses

| Week | Dates | Topic | Reading | Quiz | Assignments |
|------|---------------------|-------------------------------------------------------------------------|-------------------|---------------------------------------------------------|----------------------------------------------------------------------------------------------|
| 0 | 06-Sep | No class meeting - see info online for course introduction | skim Chapter 1 | No Quiz | Sign up for a group-deadline Sept . 23 at 2 p.m. after which you will be assigned to a group |
| 1 | Sept. 9 - Sept. 13 | Introduction to Natural Hazards, Disasters and Fundamental Concepts | Chapter 1 | Opens: Sept. 13 at 7 p.m. Closes: Sept. 16 at 1 p.m. | |
| 2 | Sept. 16 - Sept. 20 | Plate tectonics | Chapter 2 | Opens: Sept. 20 at 7 p.m. Closes: Sept. 23 at 1 p.m. | |
| 3 | Sept. 23 - Sept. 27 | Earthquakes | Chapter 3 | Opens: Sept. 27 at 7 p.m. Closes: Sept. 30 at 1 p.m. | |
| 4 | Sept. 30 - Oct. 4 | Volcanoes | Chapter 4 | Opens: Oct. 4 at 7 p.m. Closes: Oct. 7 at 1 p.m. | |
| 5 | Oct. 7 - Oct. 11 | Tsunami | Chapter 5 | No Quiz | |
| 6 | Oct. 16 - Oct. 18 | Mass wasting | Chapter 6 | Opens: Oct. 18 at 7 p.m. Closes: Oct. 21 at 1 p.m. | Assignment 1 Due: Thursday, Oct. 17, before 11:59 p.m. |
| 7 | Oct. 21 - Oct. 25 | Midterm exam Oct. 21 in class Streams and Flooding | Chapter 7 | Opens: Oct. 25 at 7 p.m. Closes: Oct. 28 at 1 p.m. | |
| 8 | Oct. 28 - Nov. 1 | Flooding Con't and Introduction to Weather/Climate | Chapters 7 and 8 | Opens: Nov. 1 at 7 p.m. Closes: Nov. 4 at 1 p.m. | |
| 9 | Nov. 4 - Nov. 8 | Severe Weather | Chapter 8 | Opens: Nov. 8 at 7 p.m. Closes: Nov. 11 at 1 p.m. | |
| 10 | Nov. 11 - Nov. 15 | Severe Weather Con't and Introduction to Climate Change and Variability | Chapters 8 and 10 | Opens: Nov. 15 at 7 p.m. Closes: Nov. 18 at 1 p.m. | Assignment 2 Due: Wednesday, Nov. 13 before 11:59 p.m. |
| 11 | Nov. 18 - Nov. 22 | Climate Change Hazards | Chapter 10 | Opens: Nov. 22 at 7 p.m. Closes: Nov. 25 at 1 p.m. | |
| 12 | Nov. 25 - Nov. 29 | Climate Change Hazards Course Wrap-up | Chapter 10 | No Quiz | |

Extension Requests and Policies

Good reasons for coursework extensions are unexpected short-term circumstances that are exceptional for the individual student, beyond that student's control, and which could reasonably be expected to have adversely impacted the student's ability to complete the assessment on time.

Grading Policies / Requests for Re-Grades

Assessments (grades) are viewed by learners in different ways depending on their individual goals and circumstances. Students can request grade reviews but must submit these requests via email to the GTA within 5 days of the grades being published. A clear statement of concern (e.g., adding errors or missing grading a section) is required in the email. The individual (GTA) who graded the assignment is responsible for the initial review. If appropriate, the assignment grade will be re-adjusted. Submitting the wrong assignment/file, misunderstanding the assignment, and thus not following the instructions are not grounds for a re-grade; requests based on these issues will not be considered.

Learning Services for First-Year Courses

Although many of you may not be first-year students, this course is designated as a first-year course. Learning resources at the Library and Learning Commons offer free services to help you succeed in first-year courses at the University of Guelph.

These opportunities include:

- meeting with a peer helper to talk about study strategies or your writing assignments
- attending Supported Learning Groups
- getting assistance finding journal articles and books
- registering for academic workshops

Please visit the library website or ask me to direct you to someone at the library and Learning Commons. Library website, www.lib.uoguelph.ca

University of Guelph Policy Statements:

E-mail Communication

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

When You Cannot Meet a Course Requirement

When you cannot meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor (or a 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

The last date to drop one-semester courses, without academic penalty, is the last day of classes in the semester (Nov. 29, 2024). For [regulations and procedures for Dropping Courses](#), see the [Undergraduate Calendar](#).

The regulations and procedures for [Dropping Courses](#) are available in the Undergraduate Calendar.

Copies of class assignments

Keep paper and/or other reliable backup copies of all 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 must 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. However, common illnesses such as colds or flu do not constitute a disability.

To use the SAS Exam Centre, students must make a booking at least seven days in advance and no later than November 1 (fall), March 1 (winter), or July 1 (summer). Similarly, new or changed accommodations for online quizzes, tests, and exams must be approved at least a week in advance.

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 to abide by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility to support an environment that discourages misconduct. Students must remain aware that instructors have access to and the right to use electronic and other detection means.

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 doubt 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 related to course work—including lectures—cannot be recorded or copied without the presenter's permission, whether the instructor, a classmate or a 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.

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g. final exam or significant assignment).

A Course Outline **Bonus Quiz** on this course outline is available until Sept.22.