

University of Guelph - Department of Geography, Environment & Geomatics

**PROVISIONAL** Course Description – Fall 2025

**GEOG\*1300 INTRODUCTION TO THE BIOPHYSICAL ENVIRONMENT**

**Class Meetings:** MWF 10:30-11:20 MAC 149

**Instructor:** Ze'ev Gedalof ([zgedalof@uoguelph.ca](mailto:zgedalof@uoguelph.ca))

**Office Hours:** MWF 11:30 - Noon HUTT 356, or by appointment

**Labs:** First 3 are in Hutt 240B; last 2 are in Hutt 020

**Graduate Teaching Assistants:** Melanie Kuntz [mkuntz@uoguelph.ca](mailto:mkuntz@uoguelph.ca)  
Hunter Rusk [ruskh@uoguelph.ca](mailto:ruskh@uoguelph.ca)  
Emma Nicholson [enicho03@uoguelph.ca](mailto:enicho03@uoguelph.ca)

**GTA Office Hours:** TBA

**STATEMENT ON ELECTRONIC AIDS**

You are responsible for all content submitted for evaluation. Remember that Generative AIs, such as ChatGPT, use existing information. This means that their use may result in misappropriation of others' work as your own should you use it and submit it. This is academic misconduct (see Section VIII in the calendar). If you have used Generative AI you must identify how and appropriately cite it as you should any third party. Be warned that generative AIs can be confidently wrong. If you use them you will get caught and you will face the maximum consequences I can muster. Do not do it!

**FIELD TRIP**

There is a mandatory field trip associated with this class scheduled for Saturday, September 20<sup>th</sup>, 2025. If you have a legitimate reason for needing to miss this field trip, e.g. Shomer Shabbos (cf. The Big Lebowski <https://www.youtube.com/watch?v=CDsgyIMK1LM>), appendicitis, a really good sportsball excuse) there is a self-guided option that is more work and has less learning attached. I grade it personally, and I think I'm a harder grader than my TAs, and definitely slower.

**REQUIRED TEXT**

Alan F. Arbogast *et al.* (2018). *Discovering Physical Geography – Canadian Edition*. Wiley

There are digital and loose-leaf versions available. I make the publisher's slides available through CourseLink, and they are the foundation for all the in-class material. You can get by without the text if you attend class, but I don't recommend it.

**ATTENDANCE**

If you don't attend class you will probably fail. I won't be scaling any grades this year. I will take pictures to verify.

**OVERVIEW**

This course is the foundation for more specialized courses in physical geography and geomatics. In it we will learn the basic principles of physical geography: biogeography, climatology,

geomorphology, hydrology, and soil science. More specifically, we will look at the patterns and processes governing climate, landforms, and vegetation systems, and their interrelationships. We will look at both natural and human-induced changes to environmental systems. Laboratories will address techniques of measurement, representation and analysis of environmental systems through maps, remotely sensed images, laboratory, and field observations.

## **COURSE AIM**

The aim of this course is to introduce the components of the Earth's natural systems as studied by physical geographers through the processes, interactions and flows of energy between of the atmosphere, hydrosphere, lithosphere and biosphere. The surface of the Earth is an extremely dynamic environment where forces and processes driven by internal and external sources of energy interact to create climate, landforms and landscapes. The effects of solar energy, climate, tectonic activity, gravity, weathering, erosion and sediment transport will be discussed within the context of physical geography. While much of the material covered will be descriptive, rather than mathematical, students are reminded that Physical Geography is a quantitative science and some of the material in this course draws upon basic science theory and relationships. From time to time simple numerical relationships will be introduced and you will be expected to solve simple problems in lab assignments and on the final exam.

## **OBJECTIVES**

- To learn the fundamental principles of physical geography
- To develop basic skills for the measurement and analysis of data relevant to earth systems
- To appreciate the beautiful complexity of the Earth system, and to experience the joy that comes from exploring it.

## **APPROACH**

The course will largely follow the textbook, with each major theme covered by in-class material supported by laboratory exercises. This is a large class, but questions, comments, and interaction are important. In my experience CourseLink is a useful resource if students use it collectively.

## **EXPECTATIONS**

Students are required to be respectful of their peers, GTAS, and the course instructor (e.g., if you wish to talk with your friends, check or post in your social media accounts, or use your cell phone please do so outside of class).

Lectures are intended to supplement the assigned readings, so students should review this material prior to class. Some in-class participation discussions will be based on assigned readings, and these must be completed before class.

**The use of digital devices (phones, tablets, laptops, etc.) for any purpose other than note-taking is not permitted during class time unless you are sitting where no other students can see your screen.** This is because the science shows that you distract the people around you more than you distract yourself and that's just not fair to them.

[See here for details](#)

**I do not make my PowerPoint files available on CourseLink. There are many reasons for this, but it boils down to two main considerations: You learn more if I don't provide them; and much of the material I present is copyrighted and I am not allowed to distribute it outside of the classroom.**

**The sharing of electronic files, other than your lecture notes, is strictly prohibited and will lead to a lot of paperwork and unwanted time with the Associate Dean Academic. (e.g. no sharing of lab assignments, graphs, essays.)**

## **COURSE EVALUATION**

- *Laboratory Exercises.* Laboratory sections meet most weeks, from week 2 to 10. See the schedule below for details.
- *Field Trip.* There is a **required** field trip on September 20<sup>th</sup>, rain or shine or ice or fire. You will be assigned to a group, but see CourseLink if you want to change sections
- There will be a *Midterm Examination* and a *Final Examination*. Both consist mainly of multiple choice questions, and a few carefully curated short answer questions. Dates **October 22 IN CLASS** and **DATE TBA, ROOM TBA.**

## **GRADING**

Laboratory Exercises	35 %
Field Trip Report	15 %
Mid-term Examination	20 %
Final Examination	30 %

All assignments must be submitted through Dropbox on Courselink. Late assignments (without prior approval) will be penalized at a rate of 10 percent of the value of the assignment per day. This course uses Turnitin to help encourage academic integrity,

## **COMMUNICATION**

This course uses ~~WebCT Blackboard D2L~~ CourseLink as the primary tool for communication and distribution of course material.

All email correspondence will be sent to your University of Guelph email address. I normally respond to student inquiries during my office hours. I do not normally reply to messages from off-campus email addresses. Only messages and postings that are appropriately professional will be responded to. For example, I ignore emails that begin "Hey," or that include texting lingo; I'm too old for that.

## **TENTATIVE SCHEDULE \***

<b>Date</b>	<b>Topic</b>	<b>Text.</b>	<b>Lab</b>
05-Sep-25	Intro	1	No Labs this week
08-Sep-25	Intro	1	Map Interpretation

Date	Topic	Text.	Lab
10-Sep-25	Lat / Long, UTM, GPS	2	
12-Sep-25	Earth-Sun geometry and seasons	3	
15-Sep-25	Global energy patterns	4	GIS and Hurricanes
17-Sep-25	Global temperature patterns	5	
19-Sep-25	Pressure wind and circulation	6	
<b>20-Sep-25</b>	<b>FIELD TRIP</b>		<b>*SATURDAY</b>
22-Sep-25	Pressure wind and circulation	6	No Labs This Week
24-Sep-25	Moisture and precipitation	7	
26-Sep-25	Weather Systems	8	
29-Sep-25	Weather Systems	8	No Labs This Week
01-Oct-25	Global climate change	9	
03-Oct-25	Global climate change	9	
06-Oct-25	Plant Geography	10	Weather & Climate
08-Oct-25	Soils	10	
10-Oct-25	Soils	11	
13-Oct-25	Reading Break	11	No Labs this week
15-Oct-25	The rock cycle and geologic time	12	
17-Oct-25	The rock cycle and geologic time	12	
20-Oct-25	Plate tectonics and landforms	13	No Labs this week
22-Oct-25	<b>MIDTERM</b>	--	
24-Oct-25	Weathering and mass movement	14	
27-Oct-25	Weathering and mass movement	14	Hillslope Processes
29-Oct-25	Groundwater and karst landscapes	15	
31-Oct-25	Groundwater and karst landscapes	15	
03-Nov-25	Fluvial systems and landforms	16	No Labs this week
05-Nov-25	Fluvial systems and landforms	16	
07-Nov-25	Glacial processes and landforms	17	
10-Nov-25	Glacial processes and landforms	17	Fluvial Processes
12-Nov-25	Glacial processes and landforms	17	
14-Nov-25	Periglacial processes and landforms	17	
17-Nov-25	Arid landscapes and aeolian processes	18	
19-Nov-25	Arid landscapes and aeolian processes	18	
21-Nov-25	Coastal processes and landforms	19	
24-Nov-25	Coastal processes and landforms	19	No Labs This Week
26-Nov-25	Geography and environmental issues	20	
28-Nov-25	Review Class - Q&A	--	

Date	Topic	Text.	Lab
	Final Exam TBA		Room TBA

*\* This is my third time teaching this course, so I'm (slightly educated) guessing at everything here. I should have it right, but I'm trying to cut down on weather and veg. to make room for coasts and deserts... Check CourseLink and attend class regularly for updates and corrections. The date for the midterm is firm.*

## University of Guelph Policy Statements (aka “The Fine Print”):

### 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.

### 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

I assume the last day of classes?

### 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, photographed 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.