GEOG*1300 Introduction to the Biophysical Environment

0.5 Credits
University of Guelph (Main Campus)
Department of Geography, CSAHS
Fall 2020 (provisional draft)

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Office hours: TBA

Prerequisite: None

Course Calendar Description

This course provides an introduction to physical geography, focusing on the principles and processes governing climate, landforms, and vegetation systems and their interrelationships and will examine natural and human-induced changes to environmental systems. Laboratories will address techniques of measurement, representation and analysis of environmental systems using maps and satellite imagery, laboratory techniques, and field observation.

Learning Outcomes

By the end of this course, students will have an understanding of the Earth as studied in physical geography through the processes, interactions, and flows of energy between of the atmosphere, hydrosphere, lithosphere and biosphere. Students will be able to:

- Explain the spatial dimension of Earth’s systems (energy, air, water, weather, climate, tectonics, rocks and landforms).
- Identify, address, and explore geographical questions using critical thought in diverse settings (classroom, lab, and field).
- Analyze the Earth as an integrated human-environment system by examining dynamic flows, interactions and exchanges at different spatial and temporal scales.
- Reflect critically upon the scope and evolution of the diverse discipline of geography.

Course Organization

Formally, this class has three scheduled lecture times per week, including Monday, Wednesday, and Friday 4:30 – 5:20 PM (Yikes! How did we get that time slot?). However, given that the Fall semester will be taught remotely, due to the Covid-19 pandemic lockdown, these scheduled times will be largely used for drop-in times. Instead, lectures will be pre-recorded and available asynchronously. In addition to lectures, each student
must attend one two-hour lab per week. For a detailed schedule of lecture and lab topics, please see the schedule in the General Materials section of the CourseLink page.

**Text and Other Resources**

The recommended text for this class is:


It is strongly recommended that you use this text as a study aid. I have placed a copy of it on reserve in the library, but you should consider purchasing your own copy. Please note that there are many older editions of this book and its international editions as well. All of these would suffice for our course, however, if you are using an alternative edition, page and chapter numbers will vary from those given as lecture readings. The onus is on the student to find the corresponding sections.

**Method of Evaluation**

The lab material constitutes an integral part of this course, since this is where students receive hands on work with photographs, and must apply the techniques they have learned. Labs must be handed in to the teaching assistant at the beginning of lab section in the week they are due, with a late penalty of 10% of the total assignment grade per day. Some lab materials may be covered on both the mid-term and final exams. **The final exam is NOT cumulative.**

**Grade Distribution**

<table>
<thead>
<tr>
<th>Item</th>
<th>%</th>
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<tbody>
<tr>
<td>Lab Assignments</td>
<td>40%</td>
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<tr>
<td>Midterm Exam</td>
<td>30%</td>
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<tr>
<td>Final Exam</td>
<td>30%</td>
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**Office Hours**

If you are having difficulties with the lab, please see one of the course TAs. TA office hours are to be scheduled and will be announced upon first meeting. For any other matters, please feel free to visit me during my office hours (Stated above) or e-mail me.

**Import Dates**

Friday September 11 — First class  
Monday October 12—Thanksgiving holiday (no class)  
Wednesday October 21—Mid-term examination (in class; worth 30%)  
Thursday December 4—Last lecture to make up for lost Thanksgiving Monday  
TBA—Final examination TBA (worth 30%)
Lecture Topics, Readings, and Lab Schedule

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<tr>
<th>Wk.</th>
<th>Date</th>
<th>Topics</th>
<th>Readings</th>
<th>Lab Schedule</th>
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<tbody>
<tr>
<td>0</td>
<td>Sept. 11</td>
<td>Introduction</td>
<td>Chapter 1</td>
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<tr>
<td>1</td>
<td>Sept. 14</td>
<td>Introduction</td>
<td>Chapter 1</td>
<td><strong>No Labs</strong></td>
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<tr>
<td>2</td>
<td>Sept. 21</td>
<td>Solar energy, the atmosphere</td>
<td>Chapter 2, 3</td>
<td>Lab 1</td>
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<tr>
<td>3</td>
<td>Sept. 28</td>
<td>Energy balance and global temperatures</td>
<td>Chapter 4, 5</td>
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<tr>
<td>4</td>
<td>Oct. 5</td>
<td>Atmospheric and oceanic circulation</td>
<td>Chapter 6</td>
<td>Lab 2</td>
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<tr>
<td>5</td>
<td>Oct. 12</td>
<td>Atmospheric moisture, weather</td>
<td>Ch 7, 8</td>
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<tr>
<td>6</td>
<td>Oct. 19</td>
<td>Hydrology</td>
<td>Chapter 9</td>
<td>Lab 3</td>
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<tr>
<td>7</td>
<td>Oct. 26</td>
<td><strong>Midterm Exam</strong>, Climate Change</td>
<td>Chapter 11</td>
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<tr>
<td>8</td>
<td>Nov. 2</td>
<td>Tectonics, earthquakes, volcanism</td>
<td>Ch. 12, 13</td>
<td>Lab 4</td>
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<tr>
<td>9</td>
<td>Nov. 9</td>
<td>Weathering and mass wasting</td>
<td>Chapter 14</td>
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<tr>
<td>10</td>
<td>Nov. 16</td>
<td>Fluvial system</td>
<td>Chapter 15</td>
<td>Lab 5</td>
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<tr>
<td>11</td>
<td>Nov. 23</td>
<td>Coastal systems and eolean processes</td>
<td>Chapter 16</td>
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<tr>
<td>12</td>
<td>Nov. 30</td>
<td>Glacial and Periglacial Landscapes</td>
<td>Chapter 17</td>
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<td>Dec. ?</td>
<td><strong>Final Exam</strong> (Location TBA)</td>
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Please note that the readings provided above are tentative and may change. Please check with the readings listed at the start of the lecture slides on the CourseLink site for a more accurate listing.

**Laboratory Exercises**

There are five equally-weighted laboratory exercises, worth a total of 40% of your final grade. Laboratory exercises will be assigned by your graduate teaching assistant (GTA) during your regular lab time. Your GTA will provide specific details about the timing and procedure for submitting each lab, but assignments are normally submitted on the due date at the start of your regular lab time. Late lab assignments will be penalized (see *When You Cannot Meet a Course Requirement*).

**Lab attendance is mandatory and attendance will be recorded by the GTA each week.** GTAs will not respond to the e-mail questions of students who fail to regularly attend a lab section.
Laboratory Times

- 0101 Thur. 10:30AM – 12:20PM
- 0102 Wed. 07:00PM – 08:50PM
- 0103 Mon. 07:00PM – 08:50PM
- 0104 Tues. 1:30AM – 3:20PM

You may not change your lab period without the permission of the instructor.

All labs are held in Hutt Room 240B. There will be occasions where the bulk of the lab will be carried out in the laboratory facilities in the basement of the Hutt building or outside but lab groups will always convene in Room 240B.

E-mail Communication

As per university regulations, all students are required to check their <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

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 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

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.