

# GEOG 102 – Global Environmental Systems: Processes and Change

Winter 2019

Lecture room: DC 1351

Class time: Tues, Thurs. 2:30-3:50pm

Instructor: Dr. Christine Dow

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Office hours: Thursday 10:00am-12:00pm

**COURSE DESCRIPTION:** This is an introductory course in the study of the landscape of the earth. We introduce the basic principles of physical geography, the ‘spheres’ of geography including the atmosphere (air), hydrosphere (water), lithosphere (land) and biosphere (living planet), and how processes in these spheres interact and interlink. Through this, we identify some of the major geographical questions of current research. We go beyond the idea that physical geography is knowledge of the names of landforms. Instead, we try to understand the formative processes, and how they have significance for human habitation of the planet, including processes of climate change and also the hazards that physical processes can cause.

**COURSE OBJECTIVES:** The major objective of this course is to understand the linkage between physical components of the planet system, how humans are affected by geographical processes, and how humans can modify geographic processes, either intentionally or unintentionally. This will be accomplished by a series of lectures, photo-blog assignments and written assignments.

**COURSE TEXTBOOK:** Christopherson, Robert W., Ginger H. Birkeland, Mary-Louise Byrne, Philip T. Giles, 2015, *Geosystems: An Introduction to Physical Geography*, updated 4<sup>th</sup> Canadian Edition, Pearson Education, Canada.

Previous editions are also acceptable except that the page numbers in the course schedule will not be correct.

You can purchase this from the bookstore as an e-textbook. You gain access to accompanying online *Mastering* material using the authorization code that comes with the textbook. This may not be available for resale texts. Online material includes practice quizzes, test questions and videos amongst others. If you wish a hard copy of the textbook, you can request one through your e-textbook access for an extra fee and it will be mailed to you.

## COURSE EVALUATION:

I-clicker in-class questions	18 %
Attendance	2 %
Writing assignment	5 %
Photo-blog Submissions	15 % (5% each)
Midterm Exam One	15 %
Midterm Exam Two	15 %
Final Exam	30 %

## PLEASE NOTE:

Note the following for essays and assignments: Text matching software (Turnitin®) may be used to screen assignments in this course. Turnitin® is used to verify that all materials and sources in assignments are documented. Students' submissions are stored on a U.S. server, therefore students must be given an alternative (e.g., scaffolded assignment or annotated bibliography), if they are concerned about their privacy and/or security. Students will be given due notice, in the first week of the term and/or at the time assignment details are provided, about arrangements and alternatives for the use of Turnitin® in this course.

It is the responsibility of the student to notify the instructor if they, in the first week of term or at the time assignment details are provided, wish to submit the alternate assignment.

**Missing Assignment and Examinations:** If you miss an exam due to a valid medical reason, personal or family emergency, etc., contact me immediately, and promptly obtain a University of Waterloo *medical or counselor's note* explaining the reason for your absence, degree of incapacitation, dates covered by the note, etc. Please provide the original of the note to me in person.

**Also note, only ONE missed examination or test**, even with a valid medical or counselor's note, will be accommodated with an alternative arrangement. The second or successive examination or test missed will result in a zero for the examination. This applies to the mid-terms and final examination.

No alternative arrangements are made for missed I-clicker quizzes or other assignments.

**Examinations:** It is the student's responsibility to be available to write exams in the scheduled times. The two midterm exams will be held in class during the lecture period. The final exam will be held during the university's scheduled examination period. The exams are mandatory, and no alternative exam dates are possible.

**In class quizzes (18%):** There will be interactive quiz questions in class using the 'I-clicker' to be purchased from the bookstore. Individual 'I-clickers' are registered to each student. *Use of an I-clicker registered to another student is cause for disciplinary action under policy 71 (see note below)*. Individual I-clickers must be registered for the course on the Learn website for Geography 102. If registered for another course, it will **NOT** be transferred to this course automatically. Note that purchase of an I-clicker is a course requirement and it is the student's responsibility to ensure that it works correctly. There will be one trial I-clicker quiz that is not worth any marks to test your I-clicker *in the first lecture*.

There will be two assessed quiz questions **every lecture**. There are 21 lectures and the quiz results from your best **18 lectures** will be recorded. That means if your I-clicker doesn't work in one class or if you have a legitimate reason for missing a class you will not be penalized.

**Each lecture I-clicker will be worth 0.5 marks.**

**Attendance (2%):** This will also be based on your i-clicker participation and from 18 of 21 lectures. So if you attend 18 lectures you will get the full 2%.

**Written assignment (5%):** You will be given a take-home question similar to the style that you will see in your midterms. This will be a one page answer worth 5 marks and is to be submitted on LEARN. The assignment will be due at 11:59pm on the date noted on the lecture schedule. Late submissions will

lose 10% (0.5 mark) for each day following the due date/time. You will be given the question one week in advance.

**Photo-blog assignments (15%):** The assignments will be posted on LEARN. Each photo blog assignment will be due at 11:59 pm on the dates noted on the lecture schedule. The ‘blog’ portion of the assignment is limited to 1500 characters (not including spaces). You may use **ONE** old photo for the assignments. The other **TWO** must be taken during the Winter term. Further details will be provided on LEARN but the photos should be accompanied by a date that they were taken and a location. Late submissions will lose 10% (0.5 mark) for each day following the due date/time.

**Materials and announcements** for the class will be found on the Universities ‘Desire to Learn’ web site at: <http://learn.uwaterloo.ca/> (use your WatIAM/Quest username and password). Documentation on this site is available at: <https://uwaterloo.ca/information-systems-technology/services/clickers/common-i-clickerquestions>. I will post the slides for the lectures that I give on this site in advance. I reserve the right to change the slides during the topic.

**Lecture schedule:**

The instructor reserves the right to change the class schedule and lecture order as appropriate.

Week #	Date	Topic	Readings (pages in Text, 4 <sup>th</sup> ed.)	Assignments
1	Jan 8 <sup>th</sup> Jan 10 <sup>th</sup>	Introduction to the course Earth Systems Concepts	5-30	Trial I-clicker quiz
2	Jan 15 <sup>th</sup> Jan 17 <sup>th</sup>	Climate Energy and the Seasons Climate Energy and the Seasons	43-72	
3	Jan 22 <sup>nd</sup> Jan 24 <sup>th</sup>	Climate Energy and the Seasons Atmosphere and Temperature	91-136	Writing assignment
4	Jan 29 <sup>th</sup> Jan 31 <sup>st</sup>	<i>Video: Climate change</i> Atmosphere and Ocean	144-171	
5	Feb 5 <sup>th</sup> Feb 7 <sup>th</sup>	<b>In Class Mid-Term TEST ONE</b> Atmosphere and Ocean		
6	Feb 12 <sup>th</sup> Feb 14 <sup>th</sup>	Moisture and Precipitation Weather Patterns	181-199 208-235	Photo-blog #1
7	Feb 18 <sup>th</sup>	<b>READING WEEK</b>		
8	Feb 26 <sup>th</sup> Feb 28 <sup>th</sup>	Weather Patterns Plate tectonics	347-378	
9	Mar 5 <sup>th</sup> Mar 7 <sup>th</sup>	Earthquakes and Volcanoes Earthquakes and Volcanoes	383-418	Photo-blog #2
10	Mar 12 <sup>th</sup> Mar 14 <sup>th</sup>	<b>In Class Mid-Term TEST TWO</b> Glaciology	532-562	
11	Mar 19 <sup>th</sup> Mar 21 <sup>st</sup>	<i>Video: Glaciology</i> Glacial geomorphology		
12	Mar 26 <sup>th</sup> Mar 28 <sup>th</sup>	Weathering and Mass Movement Fluvial Processes and Landform	423-447 453-484	Photo-blog #3
13	Apr 2 <sup>nd</sup> Apr 4 <sup>th</sup>	Ecosystems and soils Terrestrial Biomes/Exam prep	571-624 641-663	

## **Intellectual Property**

Students should be aware that this course contains the intellectual property of their instructor, TA, and/or the University of Waterloo. Intellectual property includes items such as:

- Lecture content, spoken and written (and any audio/video recording thereof);
- Lecture handouts, presentations, and other materials prepared for the course (e.g., PowerPoint slides);
- Questions or solution sets from various types of assessments (e.g., assignments, quizzes, tests, final exams); and
- Work protected by copyright (e.g., any work authored by the instructor or TA or used by the instructor or TA with permission of the copyright owner).

Course materials and the intellectual property contained therein, are used to enhance a student's educational experience. However, sharing this intellectual property without the intellectual property owner's permission is a violation of intellectual property rights. For this reason, it is necessary to ask the instructor, TA and/or the University of Waterloo for permission before uploading and sharing the intellectual property of others online (e.g., to an online repository). Permission from an instructor, TA or the University is also necessary before sharing the intellectual property of others from completed courses with students taking the same/similar courses in subsequent terms/years. In many cases, instructors might be happy to allow distribution of certain materials. However, doing so without expressed permission is considered a violation of intellectual property rights. Please alert the instructor if you become aware of intellectual property belonging to others (past or present) circulating, either through the student body or online. The intellectual property rights owner deserves to know (and may have already given their consent).

## **Academic Integrity**

In order to maintain a culture of academic integrity, members of the University of Waterloo community are expected to promote honesty, trust, fairness, respect and responsibility. The University's guiding principles on academic integrity can be found here: <http://uwaterloo.ca/academicintegrity/>

ENV students are strongly encouraged to review the material provided by the university's Academic Integrity office specifically for students: <http://uwaterloo.ca/academicintegrity/Students/index.html>

Students are also expected to know what constitutes academic integrity, to avoid committing academic offenses, and to take responsibility for their actions. Students who are unsure whether an action constitutes an offense, or who need help in learning how to avoid offenses (e.g., plagiarism, cheating) or about "rules" for group work/collaboration should seek guidance from the course professor, academic advisor, or the Undergraduate Associate Dean. Students may also complete the following tutorial: <https://uwaterloo.ca/library/get-assignment-and-research-help/academic-integrity/academic-integrity-tutorial>

When misconduct has been found to have occurred, disciplinary penalties will be imposed under Policy 71 – Student Discipline. For information on categories of offenses and types of penalties, students should refer to Policy 71 - Student Discipline, <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-71>

Students who believe that they have been wrongfully or unjustly penalized have the right to grieve; refer to Policy #70, Student Grievance: <https://uwaterloo.ca/secretariat-general-counsel/policies-procedures-guidelines/policy-70>

**Note for students with disabilities:** AccessAbility Services, located in Needles Hall, Room 1401, collaborates with all academic departments to arrange appropriate accommodations for students with disabilities without compromising the academic integrity of the curriculum. If you require academic accommodations to lessen the impact of your disability, please register with AccessAbility Services at the beginning of each academic term.

**Mental Health:** The University of Waterloo, the Faculty of Environment and our Departments consider students' well-being to be extremely important. We recognize that throughout the term students may face health challenges - physical and / or emotional. **Please note that help is available.** Mental health is a serious issue for everyone and can affect your ability to do your best work. Counselling Services <http://www.uwaterloo.ca/counselling-services> is an inclusive, non-judgmental, and confidential space for anyone to seek support. They offer confidential counselling for a variety of areas including anxiety, stress management, depression, grief, substance use, sexuality, relationship issues, and much more.

**Religious Observances:** Student needs to inform the instructor at the beginning of term if special accommodation needs to be made for religious observances that are not otherwise accounted for in the scheduling of classes and assignments.

**Grievance:** A student who believes that a decision affecting some aspect of his/her university life has been unfair or unreasonable may have grounds for initiating a grievance. See Policy 70 - Student Petitions and Grievances, Section 4, [www.adm.uwaterloo.ca/infosec/Policies/policy70.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy70.htm). When in doubt please contact your Undergraduate Advisor for details.

**Appeals:** decision made or penalty imposed under Policy 70 - Student Petitions and Grievances (other than a petition) or Policy 71 – (Student Discipline) may be appealed if there is a ground. A student who believes he/she has a ground for an appeal should refer to Policy 72 (Student Appeals) [www.adm.uwaterloo.ca/infosec/Policies/policy72.htm](http://www.adm.uwaterloo.ca/infosec/Policies/policy72.htm)

**Unclaimed assignments:** Unclaimed assignments will be retained until one month after term grades become official in Quest. After that time, they will be destroyed in compliance with UW's confidential shredding procedures <http://www.adm.uwaterloo.ca/infostor/Confidential%20Shredding%20procedures%202008.htm>

**Communications with Instructor and Teaching Assistants:** All communication with students must be through either the student's University of Waterloo email account or via Learn. If a student emails the instructor or TA from a personal account they will be requested to resend the email using their personal University of Waterloo email account.

**Recording lectures:**

- Use of recording devices during lectures is only allowed with explicit permission of the instructor of the course.
- If allowed, video recordings may only include images of the instructor and not fellow classmates.
- Posting of videos or links to the video to any website, including but not limited to social media sites such as: Facebook, Twitter, etc., is strictly prohibited.

**Co-op interviews and class attendance:** Co-op students are encouraged to try and choose interview time slots that result in the least amount of disruption to class schedules. When this is challenging, or not possible, a student may miss a portion of a class meeting for an interview. Instructors are asked for leniency in these situations; but, a co-op interview does not relieve the student of any requirements associated with that class meeting.

When a co-op interview conflicts with an in-class evaluation mechanism (e.g., test, quiz, presentation, critique), class attendance takes precedence and the onus is on the student to reschedule the interview. CECA provides an interview conflict procedure to manage these situations. Students will be required to provide copies of their interview schedules (they may be printed from JobMine) should there be a need to verify class absence due to co-op interviews.