

Western University
Department of Geography
GEO 1300b: Introduction to the Physical Environment
Winter 2018

Instructor:	Beth Hundey, PhD	Lectures:	Tuesdays, 7-9 pm
e-mail	ehundey2@uwo.ca	UCC 56	
Office:	Weldon Library 121	Labs:	002 Mondays, 10:30-12:30 pm
Office hours:	Thursdays 5-6 on	SSC 1004	004 Mondays, 2:30-4:30 pm
	Collaborate UE or in		005 Tuesdays, 4:30-6:30 pm
	person, or by		003 Wednesdays, 7:00-9:00 pm
	appointment		

Course Description

Physical Geography examines the phenomena and processes of the Earth-atmosphere system that underlie human environment interactions and environmental change. Topics include: the atmosphere and fundamentals of weather and climate, water in the environment, Earth surface processes and biogeography.

Course Learning Outcomes

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

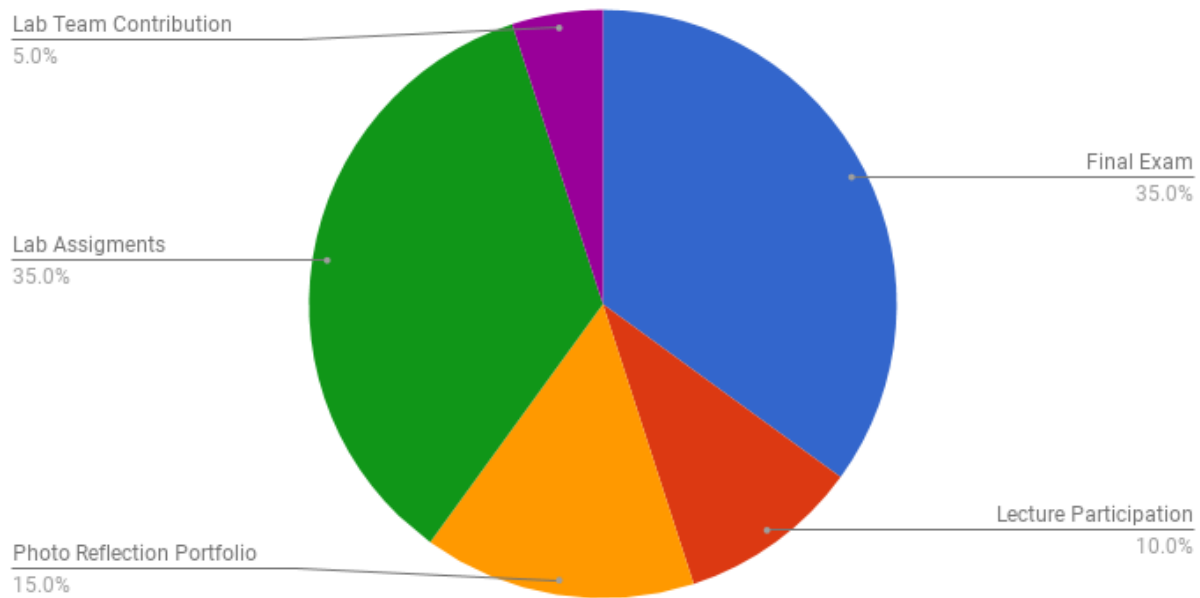
- describe the scope, core themes and fundamental methods in physical geography
- explain the physical principles of important atmospheric, lithospheric (endo- and exogenic), hydrologic and biogeographic processes and their mutual interaction
- describe and explain spatial and temporal variations in the characteristics of the global physical environment
- discuss examples of the direct and indirect effects of human activity on the physical environment
- apply simple techniques to describe and analyze the physical environment

Format

Instruction is through two lecture hours and two laboratory hours per week. Please come to class and lab prepared to be involved and respectful to your classmates, the instructor, and the teaching assistant. Be respectful of the opinions and thoughts of other classmates contributed to discussions. Derogatory or offensive remarks and responses are not acceptable, nor are they effective forms of academic debate.

Evaluation

The material covered in lectures, readings and lab assignments will be evaluated in a mid-year and a final exam. Laboratory assignments will be marked. Marking schemes will be used to assess answers to labs and exams. Partial marks are awarded for incomplete answers.



Notes:

1. Marks as posted by the course instructor are considered provisional until approved by the Department Chair. Final marks are received from the Registrar; errors may be corrected through use of a Marks Revision Form.
2. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.
3. No electronic devices will be allowed during test and examinations.

Lectures

This introductory class requires active participation from students, both for assessment and to enhance the learning experience of the class. Active learning benefits students by supporting higher-level learning and improves retention of material (M.J. Prince, 2004). There are formal and informal expectations of involvement. Lectures will be interspersed with brainstorming, activities, demonstrations, and discussion.

Lecture Participation

Participation will be assessed using iClicker (free to Western students) and small tasks within class in the following manner:

- During each lecture, 1 point will be awarded to every student who answers 75%+ clicker questions
- There are 10 possible participation points and 12 total lectures, which means you can be absent or fail to participate in 2 lectures with no participation penalty.
- There are no participation scores above 100% (12/10 participation points translates to 10/10).
- Small activities within class may also be collected to contribute to your participation grade.

Labs

Lab sections are taught by graduate student Teaching Assistants and generally completed in pairs. You are expected to go to your own lab section. There are 6 scheduled labs, and all but the last lab (which is completed individually) allow for additional in-lab time to help complete the lab. TAs will be available for consultation during the second week of labs but will not be reteaching labs.

Lab Team Contribution

The first 5 labs are completed in partnerships, and, on occasion, in teams. The lab team contribution grades will be assessed by peer and self-evaluation.

Lecture / Laboratory Timetable

The following topics will be covered in the course, as time permits.

Wk	Lecture Date	Lecture Topic	Labs and Assignments	Readings
1	Jan 9	Reading the Anthrome/ Biome Landscape	None	Ch 1, p. 1-14
2	Jan 16	Perspectives on Time and Space <ul style="list-style-type: none">• Earth system basics• Maps, models, projections• Earth-Sun relations	New lab: Maps	Ch 2 Ch 3
3	Jan 23	The Sun is like a Sun to me <ul style="list-style-type: none">• Global Radiation Budgets• Long-term climate change	<i>Work time</i>	Ch 4, 90-100 Ch 5
4	Jan 30	T-Rex Tears & Brachiosaurus Breath <ul style="list-style-type: none">• Climate expressed via air temperature• Atmospheric circulations• Oceanic circulations	New lab: Radiation budgets Lab due: Topographic Maps; Geographic Techniques	Ch 6
5	Feb 6	Humidity and Severe Weather <ul style="list-style-type: none">• Air Masses and Source Regions• Severe Weather	<i>Work time</i> Photo reflection 1 due	Ch 7, 180-189 Ch 8, 220-238
6	Feb 13	Hydrosphere & Lithosphere Location: Collaborate UE (view from home!) <ul style="list-style-type: none">• Global Hydrology and Water Resources• Lithosphere	New lab: Environmental Change – Change of location – SSC 1425 Lab due: Radiation Budgets	Ch 9, Ch 12, 350-354, 362-381 Ch 13, 384 - 415
7	Feb 20	Reading Week	<i>No lab</i>	
8	Feb 27	Midterm Review <ul style="list-style-type: none">• Review activities• Exam practice	<i>No lab</i>	<i>No Readings</i>
9	Mar 6	A river runs through it <ul style="list-style-type: none">• Drainage basins and hydrology of a stream	<i>Work time – Change of location – SSC 4425</i>	Ch 15

		<ul style="list-style-type: none"> • Classifying and describing rivers • Describing rivers: depositional features • Quantifying streamflow • Global and regional streamflow patterns 		
10	Mar 13	A glacier lay here <ul style="list-style-type: none"> • The Cryosphere • Periglacial Environments 	New lab: Rivers and their landforms Lab due: Environmental Change	Ch 17
11	Mar 20	Mass Wasting <ul style="list-style-type: none"> • Hillslopes and mass wasting • Weathering 	<i>Work time</i> Photo reflection 2 due	Ch 14
12	Mar 27	Biosphere <ul style="list-style-type: none"> • Ecosystem Processes • Biogeography 	New lab: Mass movements Lab Due: Rivers and their landforms	Ch 19, Ch 20, p. 662-666 Ch 20
13	Apr 3	Time travel to the Last Glacial Maximum <ul style="list-style-type: none"> • Long-term climate change • Human-caused climate change 	New lab: <i>Work time</i> Photo reflection 3 due	Ch 11
14	Apr 10	Environmental Change <ul style="list-style-type: none"> • Climate change • Climate interactions and feedbacks • Review 	New lab: Field observation (due in lab) Labs Due: Mass movements, Field observation	Ch 11

Course Materials

Course Text

The recommended course text is available from the UWO Bookstore and in the Course Reserves at D.B. Weldon Library.

Christopherson, R., Birkeland, G., Byrne, M., and P. Giles. (2016). *Geosystems: An Introduction To Physical Geography, 4th Canadian Edition*. Toronto, Pearson, Toronto, Ont.

Note: earlier editions of the text are generally still suitable and may be available from the used bookstore or other sources. They can be used with some attention to the fact that page number references are likely to be slightly different.

Audience Response System

We will use **iClicker** as part of the course. An explanation of iClicker participation and use is included below.

Supplementary Material

Laboratory assignments are provided through the course website on OWL. You and your lab partner are responsible for printing these and bringing to your lab.

If you buy the textbook you will be able to access the student area of the textbook website (instructions are in the book). This can be used mainly as a study tool, with sample self-test questions, reviews and weblinks. You do not need the web area of the text in order to be successful in this course.

Course Web Site

Additional course information will be provided on the web using OWL. Use <http://owl.uwo.ca> and then log in using your username and password. Your log in will require that you be officially enrolled in the course. Please become familiar with this site, as it will provide:

- lecture materials,
- videos and other resources shown in lecture,
- lab materials,
- practice exam materials,
- photo reflection portfolio submission tool (VoiceThread)

Statement on Use of Electronic Devices

No calculators will be required or permitted in the exams. Students who require electronic assistance with language translation must obtain prior approval from the instructor.

Penalties

Exams: In accordance with university policy, missed exams cannot be made up except on written medical grounds and notification prior to exam date.

Labs and assignments: Late labs and assignments have a penalty of 10% per day. Labs and assignments submitted more than 1 week late will not be accepted. Exceptions can be made for documented medical and other significant reasons beyond your control (see subsequent sections).

Non-medical Absences

Non-medical absence from the midterm requires prior approval of the instructor or approval by the Dean's office (appropriate documentation will be required by the Faculty Dean's Office for approval if it is not obtained prior to the midterm).

Medical Absences

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth **10% or more** of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

For UWO Policy on Accommodation for Medical Illness and a downloadable SMC see:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

Downloadable Student Medical Certificate (SMC):

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/medicalform.pdf When medical illness affects work worth **less than 10%** of the total course grade (i.e. a lab assignment), please contact the lab or course instructor for academic accommodation (documentation not required).

Special Exams

Students granted special accommodation for absences will write make-up tests and examinations administered by the department on Fridays during respective periods in the fall and winter terms. To prevent prior disclosure, the format and contents of make-ups may differ substantially from the scheduled test or examination.

Statements on Use of Personal Response Systems (“Clickers”)

iClicker will be used to assess participation and involve students actively in the lecture. Clicker responses will only be shared in aggregate (i.e., your iClicker responses and grade will not be shared with anyone other than you). iClicker will be used for assessing class understanding and for assessing student participation (worth 5% of final grade).

Participation will be assessed using iClicker (free to Western students) in the following manner:

- During each lecture, 1 point will be awarded to every student who answers 75%+ clicker questions
- There are 10 possible participation points and 12 total lectures, which means a student can be absent or fail to participate in 2 lectures with no participation penalty.
- There are no participation scores above 100% (12/10 participation points translates to 10/10).

Misuse of iClicker accounts (sharing accounts or answering for someone else) is not allowed, and students involved in such misuse may be charged with a scholastic offence.

University Statement on Academic Offences

Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf

Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit the site below for more information on mental health resources:

<http://www.uwo.ca/uwocom/mentalhealth/>.

Western's commitment to accessibility

The University of Western Ontario is committed to achieving barrier free accessibility for persons studying, visiting and working at Western.

Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Support Services

Registrarial Services: <http://www.registrar.uwo.ca/>

Student Development Services: <http://www.sdc.uwo.ca/>

SDC's Learning Skills Services, Rm 4100 WSS, www.sdc.uwo.ca/learning

They offer presentations on strategies for improving time management, multiple-choice exam preparation/writing, textbook reading, and more. Individual support is offered throughout the Fall/Winter terms in the drop-in Learning Help Centre, and year-round through individual counselling.

Fire Drills

Students are required to evacuate the building when the fire alarm is activated.