

The Earth's Surface, GEOG 2014

Carleton University

Department of Geography & Environmental Studies

Fall 2017

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Office Hours: Monday (11:30am-12:30am) and (2pm-3pm)

INTRODUCTION

This course introduces you to the study of **geomorphology**, an important sub-discipline of physical geography. **Geomorphology** is the study of landforms and landscapes of the Earth's surface. The objectives of the course are to introduce and illustrate major concepts, and to prepare you for more advanced courses in this subject. This course builds on many topics introduced in GEOG 1010 with emphasis placed on weathering and soils, mass movements, fluvial geomorphology, and glacial geomorphology. The topics in this course are important to students interested in the physical sciences, environmental sciences, and natural resource management and to students who wish to understand the processes underlying the formation and evolution of the landscapes surrounding them.

COURSE FORMAT

Lectures will follow the attached course outline. The lectures will introduce and illustrate the major concepts in biogeography. Support material will be available on the cuLearn course site.

SCHEDULE

Lectures: Tuesday and Thursday 1:05pm- 2:25pm in Southam Hall 517

Lab sessions: - section A01: Friday 11:35am-2:25pm in Loeb Building A211

- section A02: Tuesday 2:35pm-5:25pm in Loeb Building A211

RECOMMENDED TEXTBOOK

Trenhaile, A.S. 2016. *Geomophology: A Canadian Perspective*. 4th edition, Don Mills, ON: Oxford University Press.

STUDENT RESOURCES AND COMMUNICATION

Office Hours, Email and Appointments:

If you have questions pertaining to lecture material I encourage you to come to my office hours or to meet me at the end of class to make an appointment.

All questions about missed assignments, missed exams, and other practical concerns about the course should be directed to me by email. Emails will be responded to during business hours only. Please place the course number GEOG 2014 in the subject line.

cuLearn Course Site:

The cuLearn course site of GEOG 2014 contains information on all aspects of the course. It includes partial outlines of lectures (not complete notes) and graphs or diagrams presented in class. You need to supplement these notes by attending the class lectures or by referring to the textbook. You will be able to access cuLearn course site and to download files on the first week of classes. If you are not able to login, please contact the course instructor.

EVALUATION

Final marks in the course are based on your performance in five categories as follows:

Participation	5%
Midterm Exam	25%
Lab assignments/Exercises	20%
Term project	20%
Final Exam	30%

Participation

Students are expected to attend classes and to discuss the materials for each topic. Your attendance, asking questions, participation in class discussions, and timely submission of assignments will count towards your participation mark. Students who miss more than 4 classes without a medical note will forfeit their participation mark. A student who is consistently late for classes will be marked as absent.

Assignments

There are a total of 6 assignments due in the course that are worth 20% of your final grade. These are meant to complement the course material and to facilitate application and integration of knowledge gained from lectures and readings.

- All assignments will be available on the course cuLearn one week ahead of their due date.
- The international (metric) system of units should be used in all categories of coursework.

Term paper

The term paper will provide students an opportunity to explore a geomorphological phenomenon in detail. Students will conduct a literature review; and will organize findings in a coherent paper (**20%**). You should e-mail me your term paper topic by **Oct 12th** 8:00 pm. Submit the final version of your term paper by **Nov 30th** 8:00 pm. Note that you will submit your term report in digital form by uploading it to the cuLearn term paper dropbox. You are to name your file with your first name followed by the name of the assignment (eg. Kevin-GEOG2014-TermPaper). Late papers will be penalised 10% per day.

Exams

Exams will cover lecture and lab materials. Only students who have made prior arrangements with the instructor, or students who have contacted the instructor within 5 days of the missed exam with a valid doctor's note explaining why they missed the exam will be permitted to write the make-up exam. The final exam is not cumulative, it will only cover materials discussed after the midterm.

COURSE POLICIES

Late Assignments

Late assignments will be penalized by subtracting 10% per day (including Saturday and Sunday) of the total value of the assignment. Students whose assignments are late because of a valid medical reason or family emergency will not be penalized, however, documentation from a family physician or counseling services will be required.

Missed Assignments or Exams

Students who fail to submit and assignment or write the midterm or final exam will receive an automatic grade of zero. The only exceptions will be for instances of significant illness or a family emergency. Students confronted with these circumstances must consult with *Exam Services as soon as they are aware* that they will miss the test.

Standards of Written Work (term paper)

Any assignment submitted should be printed using *word processing software* and checked for spelling and grammar. The overall presentation quality of the assignments will be reflected in your grade.

Academic Integrity

Academic integrity is a necessary foundation for all meaningful scholarly activity and verified instances of intellectual dishonesty will be dealt with in full accordance with the procedures laid out in Academic Integrity Policy. Additional information regarding what constitutes plagiarism may be found on Carleton University web site: <https://carleton.ca/secretariat/wp-content/uploads/Academic-Integrity-Policy.pdf>

The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

Pregnancy obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: <http://www.carleton.ca/equity/>

Religious obligation: write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details visit the Equity Services website: <http://www.carleton.ca/equity/>

Academic Accommodations for Students with Disabilities: The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or pmc@carleton.ca for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your ***Letter of Accommodation*** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (*if applicable*) at <http://www.carleton.ca/pmc/new-and-current-students/dates-and-deadlines/> You can visit the Equity Services website to view the policies and to obtain more detailed information on academic accommodation at <http://www.carleton.ca/equity/>

Students representing Carleton University, Ontario or Canada (at academic or sports events): I fully support students involved with organizations and teams that travel during the semester; however, with this privilege comes additional responsibility. You are responsible for providing formal documentation identifying the organization you represent and potential schedule conflicts with this course. In the event that you are travelling and unable to attend an exam, you must schedule a secondary exam before you depart. Without proper documentation, a missed exam will earn zero points.

HINTS FOR SUCCESS

It is in your best interest to attend class regularly and to participate in class. Try to keep up with your readings and address questions you have on the subject matter at the appropriate time rather than waiting until just before the midterm and final for clarification.

This course moves quickly through a large amount of material in a short time. Try to keep up with your readings and address questions you have on the subject matter at the appropriate time rather than waiting until just before the midterm and final for clarification.

IMPORTANT DATES

Oct 12	e-mail the instructor your term paper topic
Oct 19	Midterm exam
Nov 30	Submit your term paper as Word document. You will submit it by uploading it to cuLearn term paper dropbox.
Dec	Final exam (Room: TBA)

THE EARTH'S SURFACE (GEOG2014) Fall term 2017 Course Outline

Week	Lecture Class	Lab	Readings
Sep 7	Course Introduction;	No Lab	
Sep 12-14	Introduction to Geomorphology Driving and Resisting Forces; Geology Review	Lab exercise 1: Constructing hypsometry integrals and longitudinal profiles	Ch. 1; Ch. 2
Sep 19-21	Weathering and Soil	Lab exercise 1: Constructing hypsometry integrals and longitudinal profiles (cont'd)	Ch. 4
Sep 26-28	Weathering and Soils (cont'd)	Lab exercise 2: Interpreting hypsometric integrals: isostatic rebound & landscape evolution	Ch. 4
Oct 3-5	Slope Form and Processes (Mass Wasting) <i>Term Paper Proposal Due Feb 5</i>	Lab exercise 2: Interpreting hypsometric integrals: isostatic rebound & landscape evolution (cont'd)	Ch. 5
Oct 10-12	Slope Form and Processes (Cont'd)	Lab exercise 3: Analyzing slope stability	Ch. 6

Oct 17-19	Oct 17: Q&A session related to the midterm exam Oct 19: Midterm Exam (25%)	Lab exercise 3: Analyzing slope stability (cont'd)	
Oct 24-26	<i>NO CLASS – FALL BREAK</i>	<i>NO LAB – FALL BREAK</i>	
Oct 31- Nov 2	Ontario Geology and Geomorphology	<i>NO LAB</i>	Ch. 3
Nov 7-9	Fluvial Processes and Landforms	Lab exercise 6: Open channel hydraulics & stream stability	Ch. 9 & 10
Nov 14-16	Fluvial Processes and Landforms (cont'd)/ Glacial Sediments	Lab exercise 6: Open channel hydraulics & stream stability (cont'd)	Ch. 9 & 10
Nov 21-23	Glacial Sediments and Landforms	Lab exercise 7: Ice flow patterns	Ch. 5 & 6
Nov 28-30	Glacial Sediments and Landforms/ Periglaciation <i>Research paper due Apr 2(20%)</i>	Lab exercise 7: Ice flow patterns (cont'd)	Ch. 5, 6 & 8
Dec 5-7	Dec 5: Q&A session related to the course final exam <i>DEC 7: NO CLASS</i>	<i>NO LAB</i>	
Dec	FINAL EXAM TBA (30%)		