

COURSE OUTLINE Introduction to Geomorphology

Lectures: Tuesdays 11:30-12:30 LIVE via Zoom, Wednesdays - Recording posted in Brightspace by 11:30am (watch before the next Tuesday meeting). Office Hours: Via Zoom Lecture link (located in Brightspace) Office Location: DTB B302 or via Zoom Contact: <u>gkrezoski@uvic.ca</u> or (250) 472-4269 (office phone)

Note: to follow links in this outline, the document must be downloaded and opened as a .pdf.

COURSE DESCRIPTION

Geomorphology is the study of the surface of the Earth. What makes geomorphology different from the other earth science fields is that it is primarily rooted in the explanation of present landforms and active processes. From the perspective developed by studying the present, geomorphologists may seek to interpret the importance of past events on present landforms.

This course examines a variety of geomorphological processes and systems. The goal is to provide students with an appreciation of how the landscape around them formed and its continued evolution with particular focus on landscapes of British Columbia, Canada, and western North America.

KEY THEMES:

1. Recognise and describe the characteristics of common landforms.

2. Understand and explain the physical principles of common geomorphic and hydrologic processes, and the functioning of the water and sediment cascades.

3. Explain landform development in relation to the relevant geomorphic and hydrologic processes and anticipate the effects of environmental change on both the processes and landforms.

4. Discuss, with the help of case examples, the application of geomorphology and hydrology to environmental management.

BRIGHTSPACE:

Our course will utilize the following tools in Brightspace this term:

- 1. **Zoom** will be used for live lectures (Tuesdays) and labs. Course Tools → Zoom → Lecture link (Jill) or Lab TA links for your laboratory sessions.
- 2. <u>All</u> Lecture (including Weds recordings) and Lab information will be posted in modules under '**Content'**, <u>always start there</u>.
- 3. Any dates or important information announced throughout the term will be listed in our 'Announcements' section.
- 4. All marked content will either be **Quizzes**, **Assignments**, or **Discussions** and will be linked via the aforementioned modules in 'Content'.
- 5. Any other tools used, if any (unlikely), will be announced via class and on Brightspace. Otherwise you can ignore all other Brightspace tools, if desired.

RECOMMENDED TEXT(S)

Paul R. Bierman and David R. Montgomery. Key Concepts in Geomorphology – either 2013 (1st edition) or 2020 (2nd edition). E-book can be accessed here:

https://store.macmillanlearning.com/ca/product/Key-Concepts-in-Geomorphology/p/1319059805

Class subjects are heavily integrated with the text. While the text is not required, it is highly recommended to help support your learning. The older edition is fine (readings for each version are posted below).

EVALUATION

<u>Grade Breakdown</u>	
Lecture Quizzes (3)	15 %
Lab Participation (attend 7 labs)	7 %
Lab Assignments (7)	38 %
Midterm Exam (1)	15 %
Final Exam (1)	25 %

GRADING SYSTEM

As per the Academic Calendar:

Grade	Grade point value	Grade scale	Description
A+ A A-	9 8 7	90-100% 85-89% 80-84%	Exceptional, outstanding and excellent performance. Normally achieved by a minority of students. These grades indicate a student who is self-initiating, exceeds expectation and has an insightful grasp of the subject matter.
B+ B B-	6 5 4	77-79% 73-76% 70-72%	Very good, good and solid performance. Normally achieved by the largest number of students. These grades indicate a good grasp of the subject matter or excellent grasp in one area balanced with satisfactory grasp in the other area.
C+ C	3 2	65-69% 60-64%	Satisfactory , or minimally satisfactory . These grades indicate a satisfactory performance and knowledge of the subject matter.
D	1	50-59%	Marginal Performance. A student receiving this grade demonstrated a superficial grasp of the subject matter.
F	0	0-49%	Unsatisfactory performance. Wrote final examination and completed course requirements; no supplemental.
N	0	0-49%	Did not write examination or complete course requirements by the end of term or session; no supplemental.

GEOGRAPHY DEPARTMENT INFO:

• Geography Department website: <u>uvic.ca/socialsciences/geography/</u>

Undergraduate Advising: <u>geogadvising@uvic.ca</u>

POLICY ON LATE ASSIGNMENTS

Late work receives a 20% reduction in points for each day late (weekends count as one day). Any extensions must be approved by your course instructor. Please approach your instructor first, with cc to your TAs, if requesting an extension. Requests will be granted for legitimate reasons with appropriate documentation as necessary.

POLICY ON ATTENDANCE

Lecture Quizzes are based on lecture material – attendance is strongly recommended. Lab Participation comprises 7% of your final mark – attendance is strongly recommended. **Note**: Per the academic calendar, plan on spending ~8 hours a week on average on this class, including lecture attendance, readings, lab attendance, lab assignments, etc.

WEEKLY CALENDAR (important UVIC drop/add dates can be found here)

- <u>First Day of Class</u>: Tuesday, January 12th, 2021 (Via Lecture Zoom link in Brightspace)
- Midterm Examination: February 23 (via Brightspace 'Quizzes') MC/Short answer/Long answer, ~1-1.5 hrs
- Final Examination: Apr 10-26 TBA (via Brightspace 'Quizzes') MC/Short answer/Long answer, ~2-2.5 hrs

Three quizzes will be administered throughout the term on lecture topics covered in the previous weeks. Quizzes will be open for 24 hours, Thursdays 5pm-Fridays 5pm.

WEEK	DATE	Lecture Topic	Chapter Pages for Recommended Readings (1 st ed) (2 nd ed)
1	Jan 12-13	Introduction	5-30; 4-28
2	Jan 19-20	Weathering and Soil	77-110; 120-157
3	Jan 26-27	Geomorphic Hydrology	111-137; 86-112
4	Feb 2-3	Hillslope Geomorphology (Quiz 1)	145-177; 165-197
5	Feb 9-10	Fluvial Geomorphology	179-251; 199-269
6	Feb 16-17	Reading Break – no classes	
7	Feb 23-24	Fluvial Geomorphology/ Midterm	5-251; 4-269
8	Mar 2-3	Glacial Geomorphology	291-315; 373-399
9	Mar 9-10	Periglacial Geomorphology	316-324; 399-410
10	Mar 16-17	Coastal Geomorphology (Quiz 2)	253-287; 271-304
11	Mar 23-24	Karst Geomorphology	133-137; 109-112
12	Mar 30-31	Aeolian Geomorphology	329-354; 311-338
13	Apr 6-7	Geomorphology and Landscape evolution (Quiz 3)	461-494; 491-524

DISCLAIMER

The above schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances.

LABORATORY COMPONENT

Labs are designed to cover a variety of exercises designed to elaborate on the lecture material. The labs are also used to teach practical skills in geomorphology. The laboratory sessions will be supervised by teaching assistants who will also be responsible for assessment of lab work. Lab sessions will be held synchronously (live) via Zoom (Brightspace \rightarrow Course Tools \rightarrow Zoom) at your TA's assigned Zoom link.

Tues B01 (14:30-16:20) TA: Keegan Paterson Wed B02 (12:30-14:20) TA: Keegan Paterson Thurs B03 (14:30-16:20) TA: Tuonan Li Fri B04 (10:30-12:20) TA: Tuonan Li keeganpaterson96@gmail.com keeganpaterson96@gmail.com lituonan@gmail.com lituonan@gmail.com

WEEK	DATE	Laboratory Schedule	Due dates: Fridays before 5pm
1	Jan 11-15	No Labs	
2	Jan 18-22	Lab 1: Introduction to Isostacy (5%)	
3	Jan 25-29	Lab 2: Sea-level geomorphology (5%)	Lab 1 due
4	Feb 1-5	Lab 3: Landslides (5%)	Lab 2 due
5	Feb 8-12	No Labs	Lab 3 due
6	Feb 15-19	Reading Break – no classes	
7	Feb 22-26	Lab 4: Measuring and Analyzing Slope (5%)	Midterm (Lec)
8	Mar 1-5	No Labs	Lab 4 due
9	Mar 8-12	Lab 5: Mapping I (5%)	
10	Mar 15-19	Lab 6: Mapping II (5%)	Lab 5 due
11	Mar 22-26	Lab 7: Final Lab Assignment (8%)	Lab 6 due
12	Mar 29-Apr 2	Work Week ('open' lab) – TA present	
13	Apr 6-9	No Labs	Lab 7 due

IN THE EVENT	
that Brightspace is down:	contact me via email to access the lecture material and extend deadlines for quizzes
	contact your TA to access the lab material or arrange for alternative lab submission
that Zoom is down:	Live Lectures and Lab Instruction will be recorded. Contact us if you have technical difficulties on the day and could not join.

ACADEMIC INTEGRITY

It is every student's responsibility to be aware of the university's policies on academic integrity, including policies on cheating, plagiarism, unauthorized use of an editor, multiple submission, and aiding others to cheat.

Policy on Academic Integrity:

https://www.uvic.ca/calendar/undergrad/index.php#/policies?group=Undergraduate%20Academic%20 Regulations

If you have any questions or doubts, ask. For more information, see <u>uvic.ca/learningandteaching/cac/index.php</u>.

ACCESSIBILITY

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a documented disability or health consideration that may require accommodations, please feel free to approach me and/or the Centre for Accessible Learning (CAL as soon as possible https://www.uvic.ca/services/cal/). The RCSD staff is available by appointment to assess specific needs, provide referrals, and arrange appropriate accommodations. The sooner you let us know your needs, the quicker we can assist you in achieving your learning goals in this course.

POSITIVITY AND SAFETY

The University of Victoria is committed to promoting, providing and protecting a positive and safe learning and working environment for all its members.

COURSE EXPERIENCE SURVEY (CES)

I value your feedback on this course. Towards the end of term, as in all other courses at UVic, you will have the opportunity to complete an anonymous survey regarding your learning experience (CES). The survey is vital to providing feedback to me regarding the course and my teaching, as well as to help the department improve the overall program for students in the future

NOTE: A note to remind you to take care of yourself. Do your best to maintain a healthy lifestyle this semester by eating well, exercising, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress. All of us benefit from support during times of struggle. You are not alone.