

GEOGRAPHY 376 - A01 (11809)

UNIVERSITY OF VICTORIA Fall TERM 2023 Gillian (Jill) Krezoski

COURSE OUTLINE Process Geomorphology

We acknowledge and respect the $l = k^w = \eta = 0$ peoples on whose traditional territory the university stands and the Songhees, Esquimalt and WSÁNEĆ peoples whose historical relationships with the land continue to this day.

Lectures: Monday/Thursdays, 1-2:20pm in ELL 060
Office Hours: Wednesdays and Thursdays 2:30-3:30pm
Office Location: DTB B302 or via Zoom (by appointment)
Contact: gkrezoski@uvic.ca or (250) 472-4269 (office phone)

COURSE DESCRIPTION

This course comprises a more in-depth look at concepts introduced in Introduction to Geomorphology course (GEOG 276). Here, you will dive into the <u>processes</u> of geomorphic change, with a look at the energy, forces, and components that create and maintain landforms. You will learn about geomorphic systems, the forces behind geomorphic change, feedbacks, and process linkages in natural systems. You will explore the mechanics behind the creation and transport of sediment from hillslopes to low-lying coastal areas and the formation of characteristic erosional and depositional landforms. The course is divided into 4 major topics: hillslope, fluvial, coastal + aeolian, glacial + periglacial processes. You will learn about traditional and more advanced research methods and apply some of these techniques in lab exercises.

KEY THEMES:

- Explain the principal forces and feedbacks driving geomorphic processes on Earth
- Apply basic physical relations to solve geomorphic problems
- Evaluate the suitability of research methods for a given research problem
- Critically reflect on scientific articles about geomorphic research

REQUIRED TEXTS

Throughout this course, I will provide a number of scientific articles and reading assignments that will be announced in class. Most of these articles will stem from:

Schroeder, J. (Editor in Chief) et al. (2013). Treatise on Geomorphology. Available online as .html or PDF via UVic Library E-book. ISBN: 978-0-12-398353-4. DOI: 10.1016/B978-0-12-374739-6.09021-7 If you are on campus (or accessing via VPN):

https://www.sciencedirect.com/referencework/9780080885223/treatise-on-geomorphology

Additional comprehensive text (not required, but <u>recommended</u> – a copy will be on reserve in the library for your use):

Ritter, D.F., R.C. Kochel, and J.F. Miller (2011). *Process Geomorphology* (5/e). Waveland Press (ISBN 13: 978-1-57766-669-1).

EVALUATION

Grade Breakdown

Lab Assignments (6)	45 %
Midterm Exam I	15 %
Midterm Exam II	15 %
Final Exam	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: uvic.ca/socialsciences/geography/

• Undergraduate Advising: geogadvising@uvic.ca

• Department Chair: geogchair@uvic.ca

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 after consultation with your instructor.

POLICY ON ATTENDANCE

Attendance is strongly recommended for both Lectures and Labs. Class success is unlikely otherwise.

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)

• First Day of Class: Thursday, September 7th, 2023

• Midterm Examination I: October 12th in class

• Midterm Examination II: November 9th in class

• Final Examination: December 7-20 (TBA) in person

WEEK	DATE	Lecture Topic	Readings*
1	Sept 7	Introduction	Treatise 1.1, 1.9, 2.1
2	Sept 11,14	Hillslope Processes	Treatise 4.1, 4.10, 4.17
3	Sept 18,21	Hillslope Processes	Treatise 7.13-7.23, 7.30-7.36
4	Sept 25,28	Guest speaker, Fluvial Processes	Treatise: 9.1, 9.2, 9.7
5	Oct 5 (Thurs only)	Fluvial Processes	Treatise: 9.8, 9.10
6	Oct 12 (Thurs only)	(Midterm I)	
7	Oct 16,19	Fluvial Processes	Treatise: 9.33, 9.34
8	Oct 23,26	Fluvial Processes, Glacial and Periglacial Processes	Treatise: 8.5, 8.6-8.11
9	Oct 30, Nov 2	Glacial and Periglacial Processes (guest lecture)	Treatise: 8.15-8.20
10	Nov 6,9	Glacial and Periglacial Processes, (Midterm II)	
11	Nov 13,16	Reading Break, No Class	Treatise: 10.1, 10.3-10.6, 10.8, 10.10
12	Nov 20,23	Coastal and Aeolian Processes	Treatise: 11.1, 11.2, 11.6, 11.7
13	Nov 27,30	Coastal and Aeolian Processes	Treatise: 11.11, 11.17
14	Dec 4	Final Wrap-up Session	

^{*}Readings are between ~30-50 pages per week and designed to supplement lecture material. Concepts in readings could be covered on exams. **Bolded** readings are especially helpful for labs.

DISCLAIMER

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

Examinations:

- 1. The Mid-terms will be held in the lecture rooms and during class time on the dates specified.
- 2. Exam attendance is mandatory. Exceptions will be made only under the following conditions:
 - a. I am informed in person before the exam that the absence will occur.
 - b. The student has proper written documentation of a serious medical or compassionate cause for the absence AND this documentation is provided either before or immediately after the exam;
 - c. See UVic Course Calendar

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 assignments are an essential part of GEOG376. Students are required to complete all assignments and obtain a passing grade to obtain credit for this course. Software for spreadsheet analyses and graphing (e.g., MS Excel, Open Office, etc.) will be required for some labs. Additional software can be accessed via the Geomatics Labs.

Lab dates and times:

Contact and Office hours:

Mon B01 (09:30-11:20) TA: Jill Krezoski Tues B02 (08:30-10:20) TA: Wyatt Maddox Wed B03 (08:30-10:20) TA: Wyatt Maddox gkrezoski@uvic.ca W/Th 2:30-3:30 DTB B302 wrmaddox@uvic.ca wrmaddox@uvic.ca

- 1. Attend your lab section for an introduction to the topic (instructional meetings). Please arrange with your TA if you need to miss a lab section to i) either attend a different lab section, or ii) meet your TA during their office hours.
- 2. Review your lab document and any posted material on Brightspace (bright.uvic.ca).
- 3. Complete lab activities.
- 4. Attend your lab's work block (non-instructional meetings) and your TA's office hours with questions.
- 5. Submit your assignment via virtual dropbox on Brightspace before the posted due date/time.

Week	Week of:	Laboratory Schedule	Due dates: Fridays before 5pm
1	Sept 6-9	No Labs	
2	Sept 11-13	Lab 1 – Part 1: Arbutus Cove Slope Assessment (field trip, dress appropriately for the weather)	
3	Sept 18-20	Lab 1 – Part 2: Sediments and Critical Shear Stress (DTB B303)	
4	Sept 25-27	Work Week (DTB B303)	
5	Oct 2-4	No Labs, National Day of Truth and Reconciliation	Lab 1 due (10%) Oct 6
6	Oct 9-11	No Labs, Thanksgiving	
7	Oct 16-28	Lab 2 – Part 1: Grain Size Analysis (DTB B303)	
8	Oct 23-25	Lab 2 – Part 2: Grain Size Analysis (DTB B303)	
9	Oct 30-Nov 1	Lab 3: Fluvial processes (Computer lab - DTB A251)	Lab 2 due (10%) Nov 3
10	Nov 6-8	Work Week (A251)	
11	Nov 13-15	No Labs, Remembrance Day	Lab 3 due (15%) Nov 17
12	Nov 20-22	Lab 4: Coastal/Aeolian: (Computer Lab – DTB A251)	
13	Nov 27-Dec 1	Work Week (A251)	Lab 4 due (10%) Dec 4 (*Monday)

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: web.uvic.ca/calendar/undergrad/info/regulations/academic-integrity.html

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

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 (uvic.ca/services/cal/). The CAL 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 environments 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

SEXUALIZED VIOLENCE PREVENTION AND RESPONSE AT UVIC

UVic takes sexualized violence seriously, and has raised the bar for what is considered acceptable behaviour. We encourage students to learn more about how the university defines sexualized violence and its overall approach by visiting uvic.ca/svp. If you or someone you know has been impacted by sexualized violence and needs information, advice, and/or support please contact the sexualized violence resource office in Equity and Human Rights (EQHR). Whether or not you have been directly impacted, if you want to take part in the important prevention work taking place on campus, you can also reach out:

Where: Sexualized violence resource office in EQHR; Sedgewick C119

Phone: 250.721.8021

Email: svpcoordinator@uvic.ca

Web: <u>uvic.ca/svp</u>

RESOURCES FOR INTERNATIONAL STUDENTS

The University of Victoria offers a number of resources to support international students as they pursue their studies. UVic's International Centre for Students is the primary office supporting international students on campus at the university-wide level and provides various supportive program through the UVic Global Community Initiative, including a Mentorship Program and Conversation Partner Program. For academic advising-related questions, students in the Geography Department are also encouraged to meet with the Geography Undergraduate Advisor (geogadvising@uvic.ca) as well as an academic advisor in the Academic Advising Centre early in their studies to help map out a plan to declare a major and complete university program requirements. Other resources include the Centre for Academic Communication and the Math and Stats Assistance Centre. International students are also encouraged to contact the International Student Liaison in Geography (Prof. CindyAnn Rose-Redwood, cindyann@uvic.ca), who can assist in making connections with other international and domestic students in the Geography Department and share opportunities for getting involved in departmental activities more broadly.

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.

Counselling Services - Counselling Services can help you make the most of your university experience. They offer free professional, confidential, inclusive support to currently registered UVic students. uvic.ca/services/counselling/

Health Services - University Health Services (UHS) provides a full service primary health clinic for students, and coordinates healthy student and campus initiatives. www.uvic.ca/services/health/

Centre for Accessible Learning - The CAL staff are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations uvic.ca/services/cal/. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

Elders' Voices - The Office of Indigenous Academic and Community Engagement (IACE) has the privilege of assembling a group of Elders from local communities to guide students, staff, faculty and administration in Indigenous ways of knowing and being. wvic.ca/services/indigenous/students/programming/elders/index.php