

GEOGRAPHY 376 - A01 (11776)

UNIVERSITY OF VICTORIA Fall TERM 2021 Gillian (Jill) Krezoski

COURSE OUTLINE Process Geomorphology

Lectures: Monday/Thursdays, 1-2:20pm in COR B108

Office Hours: Thursdays 11:30-12:20pm Office Location: DTB B302 or via Zoom

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

| Lecture Quizzes (3) | 12 % |
|---------------------|------|
| Lab Assignments (6) | 40 % |
| Midterm Exam I | 14 % |
| Midterm Exam II | 14 % |
| Final Exam | 20 % |

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: Dr. David Atkinson 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

Lecture Quizzes are based on lecture material – attendance is strongly recommended. Lab assignments comprise almost half 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)

- First Day of Class: Thursday, September 9th, 2021
- Midterm Examination I: October 14th (via Brightspace)
- Midterm Examination II: November 8th (via Brightspace)
- Final Examination: December 6-21 (TBA) in person
- Three quizzes will be administered via Brightspace on lecture topics covered in the previous week(s). Quizzes will open after class on Thursdays at 2:30pm to Fridays at 5pm.

| WEEK | DATE | Lecture Topic | Readings* |
|------|---------------------|---|--|
| 1 | Sept 9 | Introduction | Treatise 1.1, 1.9, 2.1, 2.5 |
| 2 | Sept 13,16 | Hillslope Processes | Treatise 4.1, 4.10, 4.17 |
| 3 | Sept 20,23 | Hillslope Processes (Quiz 1) | Treatise 7.13-7.23, 7.3-7.5 |
| 4 | Sept 27, <i>30</i> | Fluvial Processes I (Sept 30 is recorded lecture) | Treatise: 9.1, 9.2, 9.7 |
| 5 | Oct 4,7 | Fluvial Processes I | Treatise: 9.8, 9.10 |
| 6 | Oct 14 (Thurs only) | (Midterm I) | |
| 7 | Oct 18,21 | Fluvial Processes II (Quiz 2) | Treatise: 9.33, 9.34 |
| 8 | Oct 25,28 | Glacial and Periglacial Processes | Treatise: 8.5, 8.6-8.11 |
| 9 | Nov 1,4 | Glacial and Periglacial Processes | Treatise: 8.15-8.20 |
| 10 | Nov 8 (Mon only) | (Midterm II) | |
| 11 | Nov 15,18 | Coastal and Aeolian Processes | Treatise: 10.1, 10.3-10.6, 10.8, 10.10 |
| 12 | Nov 22,25 | Coastal and Aeolian Processes (Quiz 3) | Treatise: 11.1, 11.2, 11.6, 11.7 |
| 13 | Nov 29, Dec 2 | Coastal and Aeolian Processes | Treatise: 11.11, 11.17 |

^{*}Readings are between ~30-50 pages per week and designed to supplement lecture material

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.

Office hour:

Mon B01 (09:30-11:20) TA: Jill Krezoski

gkrezoski@uvic.ca

Th 11:30 DTB B302

Tues B02 (08:30-10:20) TA: Keegan Paterson Weds B03 (08:30-10:20) TA: Keegan Paterson

| Week | Week of: | Laboratory Schedule | Due dates: Sundays before 5pm |
|------|--------------|--|-------------------------------------|
| 1 | Sept 8-10 | No Labs | |
| 2 | Sept 13-15 | Lab 1: Sediments and Critical Shear Stress (DTB B303) | |
| 3 | Sept 20-22 | Lab 2: Arbutus Cove Slope Assessment (field trip, please dress appropriately for the weather) | |
| 4 | Sept 27-29 | Work Week (DTB B303) | Lab 1 due (6%) Oct 3 |
| 5 | Oct 4-6 | Lab 3: Fluvial processes (Computer lab) | Lab 2 due (6%) Oct 10 |
| 6 | Oct 11 | No Labs, Thanksgiving | |
| 7 | Oct 18-20 | Work Week (DTB A251) | Lab 3 due (10%) Oct 24 |
| 8 | Oct 25-27 | Lab 4: Glacial concepts: Part 1 (DTB B303) | |
| 9 | Nov 1-3 | Lab 4: Glacial concepts: Part 2 (DTB B303) | |
| 10 | Nov 8 | No Labs, Reading week | Lab 4 due (8%) Nov 7 |
| 11 | Nov 15-17 | Lab 5: Coastal/Aeolian: Part 1 (Computer Lab – DTB A251) | |
| 12 | Nov 22-24 | Lab 5: Coastal/Aeolian: Part 2 (Computer Lab – DTB A251) | |
| 13 | Nov 29-Dec 1 | Work Week | Lab 5 due (10%) Dec 5 |

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 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 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 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

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.