

# **GEOG 410 LEC01 Process Geomorphology**

GFC Hours 3-2

Fall 2022 classes: September 6<sup>th</sup> – December 7<sup>th</sup>, 2022

| Section | Days | Time          | Location |
|---------|------|---------------|----------|
| LEC 01  | MWF  | 11:00-11:50AM | ES54     |
| B01     | M    | 2:00-3:50PM   | ES355    |
| B02     | F    | 9:00-10:50AM  | ES355    |

| Instructor: Jennifer Lewis                                       | Office: TBD                  |
|--|------------------------------|
| Email: jennifer.lewis2@ucalgary.ca                               | Office hours: By appointment |
| Email communication will be through your UCalgary email address. |                              |

The **Department of Geography** condemns the longstanding and continued injustices against those marginalized by racism, sexism, homophobia, transphobia, classism, xenophobia, able-bodied normativity, mental health profiling, and other forms of prejudice. We are pained by the fact that injustices are unevenly borne. <a href="https://arts.ucalgary.ca/news/anti-racism-statement">https://arts.ucalgary.ca/news/anti-racism-statement</a>

#### **Territorial Acknowledgement**

The Department of Geography would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III. https://www.ucalgary.ca/indigenous/cultural-protocol

#### **Official Course Description**

A systematic study of the physical processes that shape the Earth's surface. Emphasis is on the mechanics of geomorphic processes and their interaction with Earth materials.

#### **Course Objectives**

The primary objective of this course is to explain essential concepts of process geomorphology. Students will be introduced to processes, mechanics and morphology associated with landforms and landscapes over a range of spatial and temporal scales. Students will be equipped to apply the theoretical knowledge gained in this course to a variety of applied geomorphological concerns and their management.

## **Course Learning Outcomes**

The Department of Geography is committed to student knowledge and skill development. The table below lists the key learning outcomes for this course, the program-learning outcomes to which they contribute, and the expected level of achievement.

| Course Learning Outcomes  | PLO(s)* | Level(s)** |
|---|---------|------------|
| Explain essential advanced concepts in process geomorphology                                | 2, 4    | 2, 3       |
| Understand basic hydrological processes affecting geomorphic process operation              | 2, 4    | 2          |
| Understand basic mechanics of key geomorphic processes                                      | 2, 4    | 2          |
| Explain the processes and mechanics driving the fluvial system, including sediment erosion, | 2, 4    | 2, 3       |
| transport and deposition in rivers  |         |            |
| Connect the processes and mechanics of geomorphic systems to landform and landscape         | 2, 4    | 2, 3       |
| morphology and characteristics  |         |            |

| Understand and solve quantitative problems associated with geomorphic systems by utilizing and manipulating the relevant equations | 3, 7 | 3 |  |
|--|------|---|--|
| Write assignments that report and analyze findings of lab exercises  | 3, 7 | 3 |  |
| Apply their knowledge gained in this course to other undergraduate courses and their   | 2, 5 | 2 |  |
| future workplace setting   |      |   |  |

<sup>\*</sup>PLOs = Program Learning Outcomes: 1 = reflect and communicate diverse human-environment perspectives, 2 = identify and explain human-environment processes, 3 = implement sampling, data collection, analyses and communication methods, 4 = analyze spatial and temporal aspects of human-environment systems, 5 = employ knowledge, arguments, and methodologies for solving human-environment problems, 6 = evaluate geospatial data and manipulate it to create cartographic products, 7 = communicate geographic concepts using oral, written, graphic, and cartographic modes, and 8 = demonstrate literacy skills.

### **Prerequisites**

3 units from GEOG 211, 310.

#### **Course Format**

Lecture and Labs are scheduled to meet in person. Lecture and tutorial will utilize active learning strategies, including polling and trivia. Students should bring laptops and smart devices to class to participate.

#### **Learning Resources**

- D2L: GEOG 410 T01-(Fall 2022)-Process Geomorphology
- Required Textbook: Bierman and Montgomery, Key Concepts in Geomorphology, 2nd edition: Macmillan (available through the university bookstore)
- Additional course readings may include journal articles and websites (information on how to access these materials will be provided to students as necessary)

#### **Assessment Methods**

| Assessment                   | Dates                         |
|------------------------------|-------------------------------|
| Lecture Test #1 (22.5%)      | October 7 (in class)          |
| Lecture Test #2 (22.5%)      | November 16 (in class)        |
| Lecture Test #3 (15%)        | December 7 (in class)         |
| Laboratory Assessments (30%) | See course schedule for dates |
| Laboratory Test (10%)        | See course schedule for dates |

- It is not essential to pass all components to pass the course as whole
- Only pens, pencils and erasers are allowed in exams. The use of calculators (with specific instructions on the type of calculator allowed) may be allowed for some tests. Details on whether they can be used for a particular test will be provided in lecture and lab prior to the examination.
- There is no final exam for this course.

#### **Grading System**

| 90 - 100   | A+ | 73 – 76.99 | В  | 60 - 62.99 | C- |
|------------|----|------------|----|------------|----|
| 85 – 89.99 | Α  | 70 – 72.99 | B- | 55 – 59.99 | D+ |
| 80 - 84.99 | A- | 67 – 69.99 | C+ | 50 – 54.99 | D  |
| 77 – 79.99 | B+ | 63 – 66.99 | С  | 0 - 49.99  | F  |

#### Missed or Late Course Components

• If you miss a lecture test or a lab test and possess a legitimate excuse, email Instructor Lewis (for Lecture Test) or the TA (for Lab Test) as soon as possible. At the discretion of the Course Instructor and Department, accommodation such as a deferred exam may be offered for a missed test.

<sup>\*\*</sup>Levels: 1 = Introductory, 2 = Intermediate, and 3 = Advanced.

 Unexcused late laboratory assignments handed in late will be penalized at 25% per day (or portion thereof) for that item (including weekends). Note that the penalty begins immediately after an official due date/time is missed.

Flexible Grade Option (CG Grade): https://www.ucalgary.ca/pubs/calendar/current/f-1-3.html

Supplementary Fees: Not applicable

#### **Referencing Standard:**

In written work presented in this class, the accepted method for referencing the work of others will be the Chicago Manual of Style: <a href="https://www.chicagomanualofstyle.org/home.html">https://www.chicagomanualofstyle.org/home.html</a>

#### **Important Dates:**

The last day to drop this course and receive a tuition fee refund is **Thursday, September 15**<sup>th</sup>, **2022**. The last day to add or swap a course for Fall 2022 is **Friday, September 16**<sup>th</sup>, **2022**. The last day to withdraw from this course is **Wednesday, December 7**<sup>th</sup>, **2022**. Please note that the University is closed on Friday, September 30<sup>th</sup>; Monday, October 10<sup>th</sup>; and Friday, November 11<sup>th</sup>, 2022.

For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at <a href="https://d2l.ucalgary.ca/d2l/home">https://d2l.ucalgary.ca/d2l/home</a>.

### **Resources and Writing support:**

Please note writing support resources provided by the Student Success Centre https://ucalgary.ca/ssc/resources/writing-support and the library https://libguides.ucalgary.ca/guides/

### **University of Calgary Academic Integrity Policy:**

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. The University Calendar includes a statement on the principles of conduct expected of all members of the university community (including students, faculty, administrators, any category of staff, practicum supervisors, and volunteers), whether on or off university property. This statement applies in all situations where members of the university community are acting in their university capacities. All members of the university community have a responsibility to familiarize themselves with the principles of conduct statement, which is available at: <a href="https://www.ucalgary.ca/pubs/calendar/current/k.html">www.ucalgary.ca/pubs/calendar/current/k.html</a>.

#### Plagiarism, Cheating, and Student Misconduct

The University of Calgary is committed to the highest standards of academic integrity and honesty. Students are expected to be familiar with these standards regarding academic honesty and to uphold the policies of the University in this respect.

Academic dishonesty is not an acceptable activity at the University of Calgary, and students are **strongly advised** to read the Student Misconduct section in the University Calendar at: <a href="www.ucalgary.ca/pubs/calendar/current/k-3.html">www.ucalgary.ca/pubs/calendar/current/k-3.html</a>. Often, students are unaware of what constitutes academic dishonesty or plagiarism. The most common are (1) presenting another student's work as your own, (2) presenting an author's work or ideas as your own without adequate citation, and (3) using work completed for another course. Such activities will not be tolerated in this course, and students suspected of academic misconduct will be dealt with according to the procedures outlined in the calendar at: <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure">https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure</a>

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Geography recommends that they attend Academic Integrity workshops offered through the Student Success Centre: <a href="https://www.ucalgary.ca/student-services/student-services/student-services/student-services/student-services/student-services/learning/academic-integrity">https://www.ucalgary.ca/student-services/s

### **Instructor Intellectual Property:**

Information on Instructor Intellectual Property can be found at <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy</a>

### Freedom of Information and Protection of Privacy:

Freedom of Information and Protection of Privacy (FOIP) legislation in Alberta disallows the practice of having students retrieve assignments from a public place, such as outside an instructor's office, the department office, etc. Term assignments will be returned to students individually, during class or during the instructor's office hours; if students are unable to pick up their assignments from the instructor, they must provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

**Research:** Students will not participate as subjects or researchers in human studies

### Posting of Grades and Picking-up of Assignments:

Graded assignments will be returned by the instructor or teaching assistant personally during scheduled lecture or laboratory periods, unless they are made available electronically through the course D2L webpage. Grades and assignments will not be available at the Department of Geography's main office and assignments cannot be dropped off at the Department Office.

#### **Academic Accommodations:**

It is the student's responsibility to request academic accommodations, according to the university policies and procedures listed in the University Calendar.

The student accommodation policy can be found at: <a href="https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html">https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html</a>

Students needing an accommodation because of a disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities: <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure">https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure</a>

Students needing an accommodation based on a protected ground other than disability should communicate this need, preferably in writing to their instructor or the Department Head (email: <a href="mailto:freeman@ucalgary.ca">freeman@ucalgary.ca</a>).

Media Recording: Not applicable

#### Course evaluations and student feedback:

Student feedback will be sought at the end of the course through the standard University Student Ratings of Instruction (USRI) and Faculty course evaluation forms.

#### **Copyright Legislation:**

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy</a>

and requirements of the copyright act (<a href="https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html">https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html</a>) to ensure they are aware of the consequences of unauthorised sharing of course materials (including instructor notes, electronic versions of textbooks etc.). Students who use material protected by copyright in violation of this policy may be disciplines under the Non-Academic Misconduct Act.

#### **Wellness and Mental Health Resources:**

The University of Calgary recognizes the pivotal role that student mental health plays in physical health, social connectedness, and academic success and aspires to create a caring and supportive campus community where individuals can freely talk about mental health and receive supports when needed. We encourage you to explore the mental health resources available throughout the university community, such as counselling, self-help resources, peer support, or skills-building available through the SU Wellness Centre (Room 370, MacEwan Student Centre, <a href="https://www.ucalgary.ca/wellnesscentre/services/mental-health-services">https://www.ucalgary.ca/wellnesscentre/services/mental-health-services</a>) and the Campus Mental Health Strategy website (<a href="https://www.ucalgary.ca/mentalhealth/">https://www.ucalgary.ca/mentalhealth/</a>).

Students requiring assistance are encouraged to email the **Student at Risk line** if they or others appear to need wellness assistance: <a href="mailto:sar@ucalgary.ca">sar@ucalgary.ca</a> For more immediate response, please call: 403-210-9355 and select option #2.

### **Sexual Violence Policy:**

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. Please see the policy available at <a href="https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy">https://www.ucalgary.ca/legal-services/university-policies-procedures/sexual-and-gender-based-violence-policy</a>

### **Contact Information for Student and Faculty Representation**

- Student Union VP Academic 403-220-3911, <u>suvpaca@ucalgary.ca</u>
- Students Union Representatives for the Faculty of Arts 403-220-3913, <a href="mailto:arts1@su.ucalgary.ca">arts1@su.ucalgary.ca</a>, <a href="mailto:arts1">arts1@su.ucalgary.ca</a>, <a href="mailto:arts1">arts1@su.ucalgary.ca</a>, <a href="mailto:art
- Student Ombuds Office information can be found at: www.ucalgary.ca/ombuds/

# **Emergency Evacuation/Assembly Points**

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website: <a href="https://www.ucalgary.ca/risk/emergency-management">https://www.ucalgary.ca/risk/emergency-management</a> In an emergency, the Assembly Point for our classroom is the ICT Food Court. The <a href="evacuation maps for the Earth Science building">evacuation routes to the assembly point</a>.

# **Campus Safewalk**

Campus Security, in partnership with the Students' Union, provides the Safewalk service, 24 hours a day, to any location on Campus, including the LRT station, parking lots, bus zones, and university residences. Contact Campus Security at 220-5333 or use a help phone, and Safewalkers or a Campus Security officer will accompany you to your campus destination.