

OFFICIAL UNDERGRADUATE COURSE OUTLINE FORM

Note: The University reserves the right to amend course outlines as needed without notice.

Course Code and Number: GEOG 202		Number of Credits: 4 Course credit policy (105)													
Course Full Title: Understanding Your Earth: Landforms and Processes															
Course Short Title: Landforms and Processes															
Faculty: Faculty of Science		Department: School of Land Use and Environmental Change													
Calendar Description: Describes and explains the geomorphic processes that result in the origin, evolution, morphology, and distribution of landforms in British Columbia and elsewhere. This course also describes and explains how landform change is quantified, dated, and used as a proxy for environmental (e.g. climate) change. Practical geographic skills will be developed in field and laboratory settings. Note: Field trips outside of class time will be required. Please refer to the department website for scheduling information.															
Prerequisites (or NONE):		GEOG 103 or GEOG 116.													
Corequisites (if applicable, or NONE):		NONE													
Pre/corequisites (if applicable, or NONE):		NONE													
Antirequisite Courses <i>(Cannot be taken for additional credit.)</i> Former course code/number: Cross-listed with: Equivalent course(s): <i>(If offered in the previous five years, antirequisite course(s) will be included in the calendar description as a note that students with credit for the antirequisite course(s) cannot take this course for further credit.)</i>		Course Details Special Topics course: No <i>(If yes, the course will be offered under different letter designations representing different topics.)</i> Directed Study course: No <i>(See policy 207 for more information.)</i> Grading System: Letter grades Delivery Mode: May be offered in multiple delivery modes Expected frequency: Annually Maximum enrolment (for information only): 25													
Typical Structure of Instructional Hours <table border="1"> <tr> <td>Lecture/seminar</td> <td>39</td> </tr> <tr> <td>Supervised laboratory hours (science lab)</td> <td>30</td> </tr> <tr> <td>Experiential (field trip)</td> <td>21</td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td></td> <td></td> </tr> <tr> <td>Total hours</td> <td>90</td> </tr> </table>		Lecture/seminar	39	Supervised laboratory hours (science lab)	30	Experiential (field trip)	21					Total hours	90	Prior Learning Assessment and Recognition (PLAR) PLAR is available for this course.	
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Supervised laboratory hours (science lab)	30														
Experiential (field trip)	21														
Total hours	90														
Scheduled Laboratory Hours Labs to be scheduled independent of lecture hours: <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		Transfer Credit <i>(See bctransferguide.ca.)</i> Transfer credit already exists: Yes Submit outline for (re)articulation: Yes <i>(If yes, fill in transfer credit form.)</i>													
Department approval		Date approved: November 2021													
Faculty Council approval		Date approved: December 3, 2021													
Undergraduate Education Committee (UEC) approval		Date of meeting: January 28, 2022													

Learning Outcomes *(These should contribute to students' ability to meet program outcomes and thus Institutional Learning Outcomes.)*

Upon successful completion of this course, students will be able to:

1. Articulate the scientific theories that explain the geomorphic processes shaping the physical environment through the lens of the scientific method.
2. Investigate the relationships between people and landscape from a variety of perspectives, including those of Indigenous and non-Indigenous peoples.
3. Investigate the impacts of the geomorphic processes that shape the Earth.
4. Investigate the geomorphology of a specific area through the utilization of field and/or laboratory techniques.
5. Demonstrate numerical, written and verbal competency in the field of geomorphology.
6. Adhere to professional communication standards common to geography.

Recommended Evaluation Methods and Weighting *(Evaluation should align to learning outcomes.)*

Final exam:	35%	Quizzes/tests:	25%	Lab work:	20%
Field evaluation:	20%		%		%

Details:

Instructional methods may include lectures, laboratory sessions, assigned readings, and field trips. Self-directed learning using a problem-based learning format may also be used by some instructors.

NOTE: The following sections may vary by instructor. Please see course syllabus available from the instructor.

Texts and Resource Materials *(Include online resources and Indigenous knowledge sources. [Open Educational Resources](#) (OER) should be included whenever possible. If more space is required, use the [Supplemental Texts and Resource Materials form](#).)*

Type	Author or description	Title and publication/access details	Year
1. Textbook	Trenhaile, A.S.	Geomorphology: A Canadian Perspective, 6 th Edition	2016
2. Textbook	Catto, N	Geomorphology: Landscapes we live in	2015
3. Textbook	Bierman, P.R. and Montgomery, D.R	Key Concepts in Geomorphology	2014
4. Other	Various peer-reviewed journal papers		
5.			

Required Additional Supplies and Materials *(Software, hardware, tools, specialized clothing, etc.)*

In addition to basic laboratory supplies, students will be responsible for costs associated with field trips.

Course Content and Topics

Lecture topics may include:

1. Scientific method and traditional indigenous perspectives on the evolution of the landscape
2. Brief history of geomorphology
3. Geologic history and geomorphology of southwestern British Columbia
4. Rocks, weathering, and sedimentation
5. Mass movements – physical conditions
6. Mass movements – types
7. Glacial processes and landforms
8. Aeolian processes and landforms
9. Karst landforms
10. Structural geology
11. Fluvial geomorphology
12. Coastal geomorphology

Lab topics may include:

1. Mapping techniques
2. Statistical analysis of geomorphic data
3. Sediment analysis
4. Stratigraphy and structural geology
5. Mass movements
6. Glacial geomorphology
7. Aeolian geomorphology
8. Stream flow analysis

Field trip: Field work is an integral component of this course.