



**CAMOSUN COLLEGE**  
**School of Arts & Science**  
**Department of Environmental Technology**

**ENVR-207-001B**  
**Applied Geomorphology**  
**Fall 2019**

**COURSE OUTLINE**

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The course description is online @ <http://camosun.ca/learn/calendar/current/web/envr.html>

Ω Please note: This outline will not be kept indefinitely. It is recommended students keep this outline for their records, especially to assist in transfer credit to post-secondary institutions.

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**1. Instructor Information**

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|------------------|--|--------------------|
| (a) Instructor   | Emrys Prussin                              | _____              |
| (b) Office hours | Tuesdays 2:30-3:20 and Thursdays 3:30-4:20 | _____              |
| (c) Location     | Paul 334                                   | _____              |
| (d) Phone        | (250) 370-3288                             | Alternative: _____ |
| (e) E-mail       | prussine@camosun.bc.ca                     | _____              |
| (f) Website      | _____                                      | _____              |

**2. Intended Learning Outcomes**

Upon completion of this course the student will be able to:

1. Describe the major mechanisms of initial land formation.
2. Identify the physical processes and landforms associated with geomorphic agents such as gravity, water and ice.
3. Describe the Quaternary landscape history of southwestern BC.
4. Use a variety of tools and assessment methods common to geomorphological investigations.
5. Carry out a field-based geomorphological project, data collection, analysis and reporting.
6. Interpret sedimentary deposits.

**3. Required Materials**

- (a) Texts

There is no single textbook for this course. Required readings will come from several sources, all of which are available on reserve in the library.

Christopherson, R.W. and M. Byrne, 2016. *Geosystems, 4<sup>th</sup> Canadian Edition*. Toronto: Pearson Education Canada, 669 pp. plus appendices.

Trenhaile, A.S., 2013. *Geomorphology: A Canadian Perspective, 5<sup>th</sup> Edition*. Don Mills, ON: Oxford University Press Canada, 575 pp.

(b) Other

Yorath, C.J., 2005. *The Geology of Southern Vancouver Island, Revised Edition*. Madeira Park, BC: Harbour Publishing, 205 pp.

#### 4. Course Content and Schedule

Geomorphology is the study of landforms and the processes that shape them. This course will introduce students to land formation, weathering, and the processes, landforms and sediment properties associated with geomorphic agents such as gravity, water and ice. There will be a local and regional emphasis. Through lab and field-based activities, students will learn a range of applied geomorphological skills.

**Lectures:** Will provide the background you need to understand the labs and pass the exams, so attendance is essential.

**Readings:** Are an essential part of this course – they provide depth and context that are indispensable to a full understanding of the course material. Specific reading assignments are detailed below; these may be modified as the term goes on.

Week	Monday (lab)	Wednesday (lecture)
02-Sep	No Lab - Labour Day	Course Intro and Initial Landforms
09-Sep	Weathering and Slope Erosion (lecture)	Mass Wasting
16-Sep	Lab 1: Air Photo Interpretation	Coastal Geomorphology I
23-Sep	Lab 2: Slope Stability	Coastal Geomorphology II
30-Sep	<b>Lab 3: Erosion Management - Field (Dallas Road)</b>	Fluvial Geomorphology
07-Oct	Lab 4: Surface Hydrology	Glacial Geomorphology I
14-Oct	No Lab - Thanksgiving	Glacial Geomorphology II
21-Oct	Lab 5: Fluvial Landforms	<b>Midterm Exam</b>
28-Oct	Lab 6: Glacial Processes and Landforms	Periglaciation
04-Nov	No Lab - Because of Saturday Fieldtrip	Terrain Classification
11-Nov	No Lab - Remembrance Day	River Regulation
18-Nov	Lab 7: Terrain Classification	Aeolian Geomorphology
25-Nov	<b>Lab 8: Terrain Map Validation - Field (Interurban)</b>	No Lecture - Finish Projects
02-Dec	No lab - Finish Projects	Project Presentations

#### 5. Basis of Student Assessment (Weighting)

(a)	Labs	Labs 1, 2, 4, 5, 6, 7, 8	4%
		Lab 3	12%
		TOTAL	40%
(b)	Field Trip Notes		3%
(c)	Project		12%
(d)	Midterm Exam		15%
(e)	Final Exam		30%

(a) Labs

Labs are on Mondays. Download the labs from D2L and read them ahead of time. Please hand in a hard copy of your answers.

On regular lab days, bring pencils, paper, graph paper, calculator and ruler. You will be expected to complete and hand in individual assignments, though cooperation is encouraged.

Two of our labs are field-based. The bus will leave at 1:30 sharp, so don't be late unless you have made alternate arrangements with me. Students are responsible for bringing waterproof field notebook, snacks, water, rain and cold gear, camera, sturdy footwear, ruler and pencils. The ET program will supply the rest. Please don't break our field gear – it costs a lot!

One of the field labs is to be done in pairs. This means you get each other's help and hand in a single report. On the downside, you will have to divide the job, arrange meetings, review each other's work, and compromise. This can be a pain, but is an important skill. If you are having problems with your partners, try to work it out. If you can't, come see me and I will help find a solution.

Lab performance will be evaluated based on thoroughness, neatness, accuracy, participation and, occasionally, writing quality. Attendance during the lab time is mandatory, as these labs are gear-intensive and hard to reschedule. Labs will generally be due the following week, and will not be accepted at all after I have returned them marked. Late reports are subject to a penalty of 10% per day.

(b) Exams

There will be a midterm and final exam. The format will be a combination of multiple choice, short answer and long-answer questions. Tests will mainly emphasize the lecture material, though lab material will also be drawn upon.

(c) Project

In pairs, students will be expected to research either a local landform or an applied geomorphology case study from anywhere in the world. Final reports must be in poster format. Details will be provided in a separate handout.

(d) Fieldtrip

You will be expected to attend one field trip to the Sooke Watershed, on which you should notes and hand them in. The watershed trip will take place on a Saturday. It will be awesome, so please arrange your life around it. For those who can't, a self-guided trip to Goldstream may be completed instead.

(e) Illness

If you miss a lab or exam due to illness or some other serious reason, I must ask you to provide a doctor's note or other documentation to support your story. Otherwise, a mark of zero for the missed assignment will be given. Exams and field trips are hard to reschedule, so try not to miss them unless you are too sick to perform at a reasonable level.

Students who miss a lab or exam for a valid reason must contact me within 24 hours with an explanation. In such cases, one makeup exam time will be scheduled, and all students needing it will be expected to attend.

## 6. Grading System

- Standard Grading System (GPA)
- Competency Based Grading System

## 7. College Supports, Services and Policies



### Immediate, Urgent, or Emergency Support

If you or someone you know requires immediate, urgent, or emergency support (e.g. illness, injury, thoughts of suicide, sexual assault, etc.), **SEEK HELP**. Resource contacts @ <http://camosun.ca/about/mental-health/emergency.html> or <http://camosun.ca/services/sexual-violence/get-support.html#urgent>

### College Services

Camosun offers a variety of health and academic support services, including counselling, dental, disability resource centre, help centre, learning skills, sexual violence support & education, library, and writing centre. For more information on each of these services, visit the **STUDENT SERVICES** link on the College website at <http://camosun.ca/>

### College Policies

Camosun strives to provide clear, transparent, and easily accessible policies that exemplify the college's commitment to life-changing learning. It is the student's responsibility to become familiar with the content of College policies. Policies are available on the College website at <http://camosun.ca/about/policies/>. Education and academic policies include, but are not limited to, Academic Progress, Admission, Course Withdrawals, Standards for Awarding Credentials, Involuntary Health and Safety Leave of Absence, Prior Learning Assessment, Medical/Compassionate Withdrawal, Sexual Violence and Misconduct, Student Ancillary Fees, Student Appeals, Student Conduct, and Student Penalties and Fines.

### A. GRADING SYSTEMS <http://camosun.ca/about/policies/index.html>

The following two grading systems are used at Camosun College:

#### 1. Standard Grading System (GPA)

Percentage	Grade	Description	Grade Point Equivalency
90-100	A+		9
85-89	A		8
80-84	A-		7
77-79	B+		6
73-76	B		5
70-72	B-		4
65-69	C+		3
60-64	C		2
50-59	D		1
0-49	F	Minimum level has not been achieved.	0

#### 2. Competency Based Grading System (Non GPA)

This grading system is based on satisfactory acquisition of defined skills or successful completion of the course learning outcomes

Grade	Description
COM	The student has met the goals, criteria, or competencies established for this course, practicum or field placement.
DST	The student has met and exceeded, above and beyond expectation, the goals, criteria, or competencies established for this course, practicum or field placement.
NC	The student has not met the goals, criteria or competencies established for this course, practicum or field placement.

## B. Temporary Grades

Temporary grades are assigned for specific circumstances and will convert to a final grade according to the grading scheme being used in the course. See Grading Policy at <http://camosun.ca/about/policies/index.html> for information on conversion to final grades, and for additional information on student record and transcript notations.

Temporary Grade	Description
I	<i>Incomplete:</i> A temporary grade assigned when the requirements of a course have not yet been completed due to hardship or extenuating circumstances, such as illness or death in the family.
IP	<i>In progress:</i> A temporary grade assigned for courses that are designed to have an anticipated enrollment that extends beyond one term. No more than two IP grades will be assigned for the same course.
CW	<i>Compulsory Withdrawal:</i> A temporary grade assigned by a Dean when an instructor, after documenting the prescriptive strategies applied and consulting with peers, deems that a student is unsafe to self or others and must be removed from the lab, practicum, worksite, or field placement.