



CAMOSUN COLLEGE
School of Arts & Science
Department of Environmental Technology

ENVR-207-D01A/B
Applied Geomorphology
Fall 2020

COURSE OUTLINE

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.

ABOUT THE PANDEMIC

It's an unusual time to be taking this class, to say the least. Everyone is under more stress than usual, with worries about ourselves and loved ones getting sick, loss of employment income, and no clear end in sight. None of us expected to be doing this work online – not you, not us. We are adapting, and will try to make the best of it. For your instructors, that means doing everything we can to deliver quality education, but in a new style and with limited time to prepare. It's going to be something of an experiment. We will try to check in regularly, listen to your feedback, and adjust if it seems called for.

ET is an applied program, and part of what we try to instill in our students is a sense of professionalism. That means showing up, participating, doing your best work and delivering it on time. Online course delivery does nothing to diminish the importance of those things. However, in this year's circumstances, we all need to be more flexible than usual. If you are struggling, please contact us.

From our experience so far, one of the biggest challenges of online education is maintaining the sense of connection and community that is central to an excellent educational experience. That's why we have scheduled synchronous labs. Please come to those so you can meet and interact with us and your peers; it will make a big difference to everyone's experience. Let's also make this as easy as possible by being extra kind, patient and respectful with each other.

Having said all that, we think we have come up with a plan for a great class, and are excited to work through it with you. And we have in-person field trips! Read on...

(Also see the abundance of COVID-19 information on Camosun's web site:
[http://camosun.ca/covid19/.](http://camosun.ca/covid19/))

1. Instructor Information

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| Instructors: | Chris Ayles and Emrys Prussin |
| Office hours: | Thu 9:00 – 10:00. Other times available by appointment, just email us. |
| Location: | “The Office”: online Collaborate video chat space accessed via D2L. Note: Emrys likes the American version best. Chris prefers the original British. |
| Phone: | Please email, we are almost never in our offices these days. |
| Email: | Chris: cayles@camosun.bc.ca Emrys: prussine@camosun.bc.ca |
| Web site: | D2L (online.camosun.ca) |

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. Course Materials

There is no single textbook for this course. Provided lecture and lab material will be your primary information sources. Readings are important supplements, however, as they provide a different perspective and additional depth. Recommended readings will come from several sources, all of which are available in the bookstore or on reserve in the library. However, note that library service is a little different this year: <http://camosun.ca/services/library/>

With some exceptions, we don't intend to base labs or test material directly on readings, so you may be able to substitute different texts. The important thing is to be reading something academic and relevant to the week's subject matter. One good online text is [Fundamentals of Physical Geography](#).

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| (a) | Texts | <p><u>Optional:</u> Christopherson, R.W. and M. Byrne, 2016. <i>Geosystems, 4th Canadian Edition</i>. Toronto: Pearson Education Canada, 669 pp. plus appendices.</p> <ul style="list-style-type: none"> • Older versions are around, and will probably do the job. <p><u>Optional:</u> Trenhaile, A.S., 2013. <i>Geomorphology: A Canadian Perspective, 5th Edition</i>. Don Mills, ON: Oxford University Press Canada, 575 pp.</p> <ul style="list-style-type: none"> • Same comment as above. <p><u>Optional:</u> Yorath, C.J., 2005. <i>The Geology of Southern Vancouver Island, Revised Edition</i>. Madeira Park, BC: Harbour Publishing, 205 pp.</p> <ul style="list-style-type: none"> • This can be found at Camosun and most other local bookstores. |
| (b) | Equipment | <p>You will need a computer for this class – not just a smart phone. If you don't have access to one, you can look into the loaner program set up by Camosun by contacting laptops@camosun.bc.ca. Some computer access may be possible at Camosun's libraries.</p> <p>For in-person field trips (!!!), you will need a waterproof field notebook, pencil, camera, ruler, and whatever clothing is needed to keep you comfortable for three hours outside – trips will run rain or shine. We particularly recommend that you invest in decent rain gear: boots, pants and jacket. <u>You will also need hand sanitizer and a mask</u> to help us minimize the risk of virus transmission.</p> |

4. Course Format

- **Lectures:** Lecture material will provide the background you need to understand the labs and pass the quizzes and final exam. We will post detailed lecture notes, PowerPoint slides, video tutorials and supplemental materials on D2L. You can access these on your own schedule, but make sure you are keeping pace so you are ready for the quizzes as they come along. We strongly suggest that you take your own notes as you read and listen to the lecture material. This will help it to sink in, and give you an excellent study resource.
- **Readings:** Reading assignments will be provided as the term goes.
- **Labs:** Unless you hear otherwise from your instructors, labs are synchronous. That means you need to log into D2L or meet in the field for the scheduled time period. Lab assignments and supplemental material will be posted on D2L. That's also where you will submit your completed work. Please read assignments ahead of time so you can make the most of lab time.

Unless otherwise stated by the instructors, students will be expected to complete and hand in individual assignments, though cooperation is encouraged.

Lab performance will be evaluated based on thoroughness, neatness, accuracy, participation and, occasionally, writing quality. Labs will generally be due the following week, and will not be accepted at all after they have been marked and returned. Late work is subject to a penalty of 1%

per day – a pittance, yes, but hopefully enough to remind you that deadlines matter in the real world.

- **Field trips:** We received approval from the college to run in-person field trips! Four are planned. We are collectively responsible for undertaking these in compliance with public health orders and Camosun’s COVID safety protocols, so that no one gets sick. We believe this is eminently possible in the field, where space and fresh air are in ample supply. On top of that, we will take extra care to spread out, mask up when needed, avoid sharing equipment, etc. Students will be expected to complete Camosun’s COVID safety training and complete associated paperwork – details TBA.

For field trips, you need to arrange your own virus-free transportation. We will make the field sites as accessible as possible, so you shouldn’t have to walk too far from a bus stop. Please arrive punctually at the start of lab time. 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 (Lab 3) is best 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 partner, try to work it out. If you can’t, we can help find a solution.

Field work is essential to geomorphology and environmental science generally, so we see these trips as a great opportunity. However, if you feel unsafe or uncertain, or are doing this course from a distant location, please contact us about alternatives.

- **Project:** 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. These will be presented at an online poster session, with opportunities for Q&A. Details will be provided in a separate handout.
- **Tests:** There will be four quizzes and a final exam. The quizzes each will cover roughly two weeks of lecture material, and will not be cumulative. The final exam will be cumulative, and cover both lecture and lab material. The format will be a combination of multiple choice, short answer and long-answer questions. All tests will be delivered on D2L. Details TBA.
- **Illness, etc.:** If you miss a required activity or blow a deadline due to illness or some other serious reason, we will likely require a doctor’s note or other documentation to support your story. Otherwise, a mark of zero for the missed assignment will be given. Tests and field trips are hard to reschedule, so try not to miss them unless you are too sick to perform at a reasonable level. This being the time of COVID, we realize that issues like this may come up more often. Prompt communication is key.

5. Basis of Student Assessment

Evaluation will be based on accuracy, thoroughness, and neatness. As a general rule, always show your work and keep track of units of measure! When grading your work, we are looking for proof of your understanding, so do everything clearly and carefully – that way you may get partial credit, even for wrong answers. We endeavour to mark things fairly and consistently, but if you have a question about the assessment of your work, feel free to ask about it.

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| (a) | Labs | Labs 1, 2, 4, 5, 6, 7 5% Lab 3 15% <hr/> TOTAL 45% |
| (b) | Project | 15% |
| (c) | Quizzes | 4 @ 5% = 20% |
| (d) | Final Exam | 20% |

6. Grading System

This course uses Camosun's standard grading system:

| 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 |

For more detail, see <http://camosun.ca/about/policies/index.html>

7. COURSE SCHEDULE (Subject to change at instructors' discretion):

NOTE: This is a 12-week course, with nothing scheduled until Sep. 23. However, **on Sep. 8, you need to log into the D2L site at least once for attendance recording.**

ALSO NOTE: Field-based activities are shown in bold; come prepared!

| Week | Lab (Wednesdays) | Lecture (self paced) |
|-------------|---|--|
| 7-Sep | Labour Day | - |
| 14-Sep | - | - |
| 21-Sep | Course Intro | Initial Landforms |
| 28-Sep | No lab; extra lecture material this week. | Glaciers; Quiz 1 due Friday |
| 5-Oct | Lab 1: Glacial Processes and Landforms | Weathering and Slope Erosion |
| 12-Oct | Glacial Landforms Field Trip | Slope Stability |
| 19-Oct | Lab 2: Slope Stability | Coasts; Quiz 2 due Friday |
| 26-Oct | Lab 3: Erosion at Dallas Road | Rivers 1 |
| 2-Nov | Lab 4: Surface Hydrology | Rivers 2; Quiz 3 due Friday |
| 9-Nov | Remembrance Day | None; work on Lab 3 report |
| 16-Nov | Lab 5: Fluvial Landforms | Terrain Classification |
| 23-Nov | Lab 6: Terrain Classification | Periglacial Landscapes; Quiz 4 due Friday |
| 30-Nov | Lab 7: Terrain Map Validation | None; work on project. |
| 7-Dec | Poster Session | TBA |

Exam Weeks: Review session (date and time TBD)
Final exam (date and time TBD)

8. 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.