

# COURSE SYLLABUS



COURSE TITLE: ENGR166  
CLASS SECTION: X01 and X02  
TERM: 2024W  
COURSE CREDITS: 3  
DELIVERY METHOD(S): Lecture and Lab

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and WSÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

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*Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.*

## INSTRUCTOR DETAILS

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NAME: David Ley  
EMAIL: [LeyD@camosun.ca](mailto:LeyD@camosun.ca)  
OFFICE: TEC264  
HOURS: Th 12:30-1:30pm, Fr 11:00-12:00

*As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.*

## CALENDAR DESCRIPTION

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An introduction to minerals, rocks and economic deposits, rock-forming processes, weathering and soils, erosion by gravity, water, ice and wind, plate tectonics, structural geology, and mountain building, mass wasting, and naturally-occurring or man-made geological hazards of interest to engineers. Field-based geological investigations form part of the laboratory.

Open to students in Engineering Bridge programs.

## COURSE LEARNING OUTCOMES / OBJECTIVES

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Upon successful completion of this course a student will be able to:

- Describe the internal structure and evolution of the Earth, and have a working knowledge of principles of geological time, Earth history and the geologic time scale;
- Identify common rock-forming minerals and common rocks, and briefly describe their composition, mode of origin and significance as an engineering material;

- Discuss physical and chemical processes of weathering and soil development, and erosion of geologic materials by gravity, water, ice and wind with reference to engineering material;
- Discuss the theory of plate tectonics in relation to geological processes such as volcanism, faults and earthquake activity, mountain building, and the rock cycle;
- Discuss geological hazards (earthquakes, mass-wasting, subsidence, slope stability, and acid mine-drainage) and other topics of environmental concern to the engineer; and
- Interpret and use geological maps as effective tools for engineering planning.

#### REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- Lecture notes and videos posted in course D2L
- Text book <https://opentextbc.ca/geology/>
- Alternative textbook - Earth: An Introduction to Physical Geology; Updated Fourth Canadian Edition, 2019; Tarbuck, Lutgens, Tsujita, and Hicock

#### COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Week	Week Beginning	Topic	Deliverables
1	2024-01-08	Course Introduction, Introduction to Geology, Geologic Time and Plate Tectonics	
2	2024-01-15	Rock Forming Minerals	Quiz 1 covering Week 1
3	2024-01-22	Rock Forming Minerals, Igneous Rocks	
4	2024-01-29	Volcanoes and Volcanic Processes	
5	2024-02-05	Weathering and Soils, Sedimentary Rocks	Quiz 2 covering Weeks 4-5
6	2024-02-12	Sedimentary Rocks, Metamorphic Rocks	Rock and Mineral Quiz
7	2024-02-19	READING WEEK	
8	2024-02-26	Crustal Deformation, Earthquakes and Earth's Interior	
9	2024-03-04	Ocean Floor, Mountain Building, Mass Wasting	Quiz 3 covering Weeks 8-9
10	2024-03-11	Surface Water, Groundwater	
11	2024-03-18	Glaciation, Deserts and Wind, Shorelines	Quiz 4 covering Weeks 10-11
12	2024-03-25	Mineral Resources, Geologic Mapping, Intro to Reporting	Quiz 5 covering Week 12
13	2024-04-01	Geologic/Hydrogeologic Report	
14	2024-04-08	Geologic/Hydrogeologic Report	

 Week contains a statutory holiday

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced noticed is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

## EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Quizzes – Five total	50
Mineral and Rock Identification	15
Term Assignment / Final Report	30
Instructor Evaluation	5
<b>TOTAL</b>	<b>100%</b>

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information. <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

## COURSE GUIDELINES & EXPECTATIONS

- Presence is required at all scheduled course components.
- Online quizzes are to be completed individually and are open book, classroom quizzes are closed book.
- Late assignments will have 10% deducted per day late. Assignments submitted after graded assignments have been returned are worth 0.
- Instructor Evaluation will be based on attendance, and participation during classes and labs

## SCHOOL OR DEPARTMENTAL INFORMATION

### Department:

- Civil Engineering Department: Chair is Zoe Broom, TEC 116.
- Bridge Program Coordinator: Peter Burrage, TEC 112
- See the chair/program leader if you need:
  - program help such as working out a part-time schedule
  - help with transfer credits
  - info on services from other departments.

See your instructor if you need help with the course.

**School:** School of Trades and Technology. Office TEC 169

- Dean is Eric Sehn
- Associate Dean is Ken Kosik

- Both are in TEC 169
- Student issues are looked after by the Associate Dean. However, if you need anything, go to the department chair first.

Equity, diversity, and inclusion (EDI) are central to Camosun's culture and values. The Camosun community and the engineering community at large commit to pursuing equity in education regardless of race, heritage, religion, gender or gender identity, and ability. We learn best when we feel safe. Inappropriate, hateful or demeaning comments or actions will not be tolerated. Your suggestions on how to make your experience here better are encouraged and appreciated. Please let me or the department chair know ways to improve your experience at Camosun. If you wish to know more about Camosun's EDI policy, please see the EDI page on the college's website: <http://camosun.ca/about/policies/equity-diversity-inclusion.html>

## STUDENT RESPONSIBILITY

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Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

## SUPPORTS AND SERVICES FOR STUDENTS

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Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

Support Service	Website
Academic Advising	<a href="http://camosun.ca/advising">http://camosun.ca/advising</a>
Accessible Learning	<a href="http://camosun.ca/accessible-learning">http://camosun.ca/accessible-learning</a>
Counselling	<a href="http://camosun.ca/counselling">http://camosun.ca/counselling</a>
Career Services	<a href="http://camosun.ca/coop">http://camosun.ca/coop</a>
Financial Aid and Awards	<a href="http://camosun.ca/financialaid">http://camosun.ca/financialaid</a>
Help Centres (Math/English/Science)	<a href="http://camosun.ca/help-centres">http://camosun.ca/help-centres</a>
Indigenous Student Support	<a href="http://camosun.ca/indigenous">http://camosun.ca/indigenous</a>
International Student Support	<a href="http://camosun.ca/international/">http://camosun.ca/international/</a>
Learning Skills	<a href="http://camosun.ca/learningskills">http://camosun.ca/learningskills</a>
Library	<a href="http://camosun.ca/services/library/">http://camosun.ca/services/library/</a>
Office of Student Support	<a href="http://camosun.ca/oss">http://camosun.ca/oss</a>

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Support Service	Website
Ombudsperson	<a href="http://camosun.ca/ombuds">http://camosun.ca/ombuds</a>
Registration	<a href="http://camosun.ca/registration">http://camosun.ca/registration</a>
Technology Support	<a href="http://camosun.ca/its">http://camosun.ca/its</a>
Writing Centre	<a href="http://camosun.ca/writing-centre">http://camosun.ca/writing-centre</a>

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If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

## COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

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### Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](#) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

### Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

### Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

### Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

### Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

### Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

### Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the “Attendance” section under “Registration Policies and Procedures” (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

### Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

### Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun’s Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student’s right to choose what is right for them. For more information see Camosun’s Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.9.pdf> and [camosun.ca/sexual-violence](http://camosun.ca/sexual-violence). To contact the Office of Student Support: [oss@camosun.ca](mailto:oss@camosun.ca) or by phone: 250-370-3046 or 250-3703841

### Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College’s Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College’s expectations of academic integrity and student behavioural conduct.

**Changes to this Syllabus:** Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.