

COURSE SYLLABUS



COURSE TITLE:	CIVE 251 – ASSET MANAGEMENT
CLASS SECTION:	X01A and X01B
TERM:	2023F
COURSE CREDITS:	3
DELIVERY METHOD(S):	Lecture and Computer Lab

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

INSTRUCTOR DETAILS

NAME:	Peter Fell
EMAIL:	fellp@camosun.ca
OFFICE:	TEC 108
HOURS:	See office door / D2L

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

Students are provided an overview of current practices as they relate to asset management and infrastructure rehabilitation. Topics include assessment, protection and repair of: pavement, underground pipes, and steel, concrete and masonry structures. Geographic Information Systems (GIS) software is utilized to evaluate infrastructure rehabilitation needs. Basic engineering economics concepts are introduced.

PREREQUISITE(S):	All of: C in CIVE 132
PRE or CO-REQUISITE(S):	none
EXCLUSION(S):	none

COURSE LEARNING OUTCOMES / OBJECTIVES

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

- Apply the basic concepts of infrastructure asset management planning to preserve and extend the service life of long-term infrastructure assets.
- Evaluate and select appropriate methods for the inspection, condition assessment and rehabilitation of underground pipelines, pavement, steel, concrete and masonry structures, and steel and concrete bridge decks.
- Describe destructive and non-destructive testing methodologies used to assess the condition of civil infrastructure.
- Compare maintenance methods related to infrastructure.
- Describe the process of corrosion and methods for corrosion prevention and rehabilitation.

- Describe the history and process behind building envelope failures.
- Identify methods for building envelope assessment and rehabilitation.
- Apply GIS software tools to develop a record of infrastructure assets.
- Assess infrastructure and develop a rehabilitation plan.
- Assess and apply tools utilized in the inspection, assessment, planning and decision-making process, including: GIS; engineering economics and life-cycle costing; civil analysis and asset management software.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- There is no required text for this course.
- Lecture notes, videos and other supporting material posted on course web pages.

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.

Lectures are as follows:

- Monday 3:30 – 4:50 PM in CBA 101
- Wednesday 8:30 - 9:50 AM in CBA 117

Labs are as follows:

- X01A: Wednesday 1:30 - 3:20 PM in TEC 151
- X01B: Thursday 10:30 AM - 12:20 PM in TEC 150

WEEK	DATE RANGE	LECTURE TOPICS	LAB TOPIC	OTHER
1	Sept 4 – 8	No lecture Monday 4 Sept (Labour Day – College closed) Course Introduction; Introduction to Asset Management	Engineering Economics	
2	Sept 11 – 15	Intro to Research Report; Asset Management - Basic concepts and framework	Engineering Economics	Research Topic Report – Team Selection (due Friday 15 Sept not later than 4:30pm)
3	Sept 18 – 22	Asset Management – Implementation and examples	Engineering Economics	
4	Sept 25 – 29	Asset Management - Benchmarking; Inspection and Condition Assessment – Introduction	Engineering Economics	Research Topic Report – Draft Outline (due Friday 29 Sept not later than 4:30pm) Quiz 1 (D2L)
5	Oct 2 – 6	No lecture Monday 2 October (National Day for Truth and Reconciliation – College closed); Inspection and Condition Assessment Methods	Engineering Economics	Research Topic Report - Group Meetings (D2L / in person by appointment)

WEEK	DATE RANGE	LECTURE TOPICS	LAB TOPIC	OTHER
6	Oct 9 – 13	No lecture Monday 9 October (Thanksgiving – College closed); Inspection and Condition Assessment Methods (cont.)	Engineering Economics	Research Topic Report – Finalized Outline (due Friday 13 Oct not later than 4:30pm)
7	Oct 16 – 20	Inspection and Condition Assessment Methods (cont.)	GIS	Quiz 2 (D2L)
8	Oct 23 – 27	Inspection and Condition Assessment – Bridges (Guest Lecturer); Maintenance	Term Test No. 1 (D2L - during lab period)	
9	Oct 30 - Nov 3	I&I considerations; Corrosion	GIS	Research Topic Report Progress Report / Group Meetings (D2L / in-person by appointment)
10	Nov 6 – 10	Rehabilitation Methods - Introduction	GIS	Quiz 3 (D2L)
11	Nov 13 – 17	No lecture Monday 13 November (Remembrance Day – College closed); Rehabilitation Methods (cont.)	GIS	
12	Nov 20 – 24	Rehabilitation Methods (cont.)	GIS	Quiz 4 (D2L)
13	Nov 27 – Dec 1	Building Envelopes	Term Test No. 2 (D2L – during lab period)	
14	Dec 4 – 8	Report Presentations and Roundtable discussion	No lab anticipated	Research Topic Report due last day of classes Friday 8 Dec, not later than 4:30pm)
15/16	Dec 11 – 19	Exam Week (no exam in this course)		

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 notice is required. Deadlines can be reviewed on the CAL exams page. <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING	Notes
Assignments	15%	Assignments, submitted individually, unless otherwise noted. Includes Research Report outlines, progress report and group meetings.
Quizzes	10%	Open book. Four quizzes are anticipated. Best three quizzes count. Quizzes will be in D2L (available over several days).
Term Tests	40%	Open book. Two term tests will be held. 2hr duration each. Term Tests in D2L during lab periods.
Research Report	30%	Group research report.
Instructor Evaluation	5%	Based on attendance, cooperation, participation, not submitting plagiarized work, etc.
TOTAL	100%	

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 policy for more information.

<https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

- Unless otherwise noted, assignments are due at the start of the applicable lecture or lab period. Late assignments will have 10% deducted. Assignments submitted after graded assignments have been returned or after solutions have been posted are worth 0.
- You must achieve an average of 50% on the term tests in order to pass the course.
- Presence is required for all scheduled course components. Attendance for the lectures and labs is included as part of the instructor assessment portion of your final grade. If you plan to or do miss a lecture or lab you must contact the instructor.

SCHOOL OR DEPARTMENTAL INFORMATION

Department:

- Civil Engineering Department. Chair is Zoe Broom, TEC 116.
- See the chair 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 policy: <https://camosun.ca/sites/default/files/2021-05/g-2.1.pdf>

STUDENT RESPONSIBILITY

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

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	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre
Career Services	camosun.ca/services/co-operative-education-and-career-services
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student-services
International Student Support	camosun.ca/international

Support Service	Website
Learning Skills	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its
Writing Centre	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills

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

Academic Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

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:

<https://camosun.ca/services/academic-supports/accessible-learning>

Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

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 (see policy). Please visit <https://camosun.ca/services/forms#medical> 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: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and camosun.ca/services/sexual-violence-support-and-education. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

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 <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

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.