



CAMOSUN COLLEGE
School of Trades and Technology
Department of Civil Engineering Technology

CIVE 289
Civil Capstone
Winter 2019

COURSE OUTLINE

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.

1 Instructor Information

Instructor	Peter Fell and Robin Ley
Office hours	See instructor's website and postings outside offices
Location	TEC 108 (PF); TEC 267 (RL)
Phone	250-370-4483 (PF)
E-mail	FellP@camosun.bc.ca ; LeyR@camosun.bc.ca
Website	http://civil.camosun.bc.ca/student/

2 Prerequisites and Corequisites

Prerequisites

All of:

- C in CIVE 251
- C in CIVE 271
- C in CIVE 255
- C in CIVE 276
- C in CIVE 261
- C in CIVE 291

Corequisites

- ENGL 273

3 Hours and Credits

Course Activity

- Lecture (Direct Instruction)
- Seminar (Direct Instruction)
- Lab /Collaborative Learning
- Supervised Field Practice
- Workplace Integrated Learning (*Coop, Internship, etc.*)
- Other* (*please note*):

Hours / Week	Instruction – No of Weeks (Q=11; S=14; "P or S" = 7)
3	14
3	14

Credits = 4

4 Short Description

Working in teams, students select, plan and execute a civil engineering design project of their own choosing. All components of the project require scope and progress monitoring, design documentation and compliance to the ASTTBC Code of Ethics. A formal written report is completed as part of an accompanying course, ENGL 273. The project applies the theory students previously learned in the Civil Engineering Technology program and concludes in a project presentation event with their peers.

5 Intended Learning Outcomes

- Apply relevant safety regulations and best practices in the lab and in the field.
- Research, plan and schedule the completion of a technical design project within the field of civil engineering.
- Identify and prioritize design criteria and assess a suitable project scope.
- Work effectively in a team to design a technical project.
- Monitor project progress and adapt the project scope accordingly.
- Complete a post-completion analysis of project progress and team participation and identify recommendations for improvement.
- Prepare a comprehensive set of design calculations.
- Document the use of supporting design software including variables, methods and algorithms.
- Present final design in an appropriate medium such as: poster; video; architectural fly-through; or model.
- Produce appropriate technical documentation such as: construction drawings, user documentation, specifications, or client report.
- Apply the ASTTBC Code of Ethics throughout the project.

6 Course Content and Schedule

<i>Week</i>	<i>Topics (Lecture)</i>	<i>Topics (Seminar)</i>	<i>Deliverables</i>
1	Course and project overview	Project Ideas Q&A	3 Project Ideas
2	The civil engineering design process	Seminar session with instructor - MS Project	
3	Ethics Lecture	Seminar session with instructor – Proposal	Project Proposal (Technical Submission)
4	Guest Lecturer - EGBC OQM Program	Seminar session with instructor – technical proposal feedback	Project Proposal (Engineering Cost Submission)
5	15-minute progress report to class	Seminar session with instructor – cost proposal feedback	Proposal Presentation / Accountability Log with Reflection
6	Next phases of the project	Seminar session with instructor	
7	Reading Break		
8	15-minute progress report to class	Seminar session with instructor – if needed	Presentation – progress report / written Interim Progress Report
9	Guest Speaker – Project Owner / Client	Seminar session with instructor	
10	Guest Speaker – Consultant	Seminar session with instructor	Accountability Log with Reflection

Week	Topics (Lecture)	Topics (Seminar)	Deliverables
11	15-minute progress report to class	Seminar session with instructor – if needed	Presentation – progress report
12	Guest Speaker – Contractor	Seminar session with instructor	Project Poster
13	Guest Speaker – General	Seminar session with instructor – if needed	
14	Final report / presentation Q&A	Seminar session with instructor – if needed	Design Report / Design Drawings
15 / 16	Exam Week		Final Presentation (25 and 26 April) / Project Cost Report / Accountability Log with Reflection

Notes:

- 1) For seminars, scheduled mandatory meetings will be held. When a group meets with a Technical Advisor other than the seminar instructor, they should arrange to conduct their group meeting with that faculty member directly. Such groups are still required to attend the scheduled seminar time for a brief 'check-in' with the seminar instructor, or as otherwise required.
- 2) For weeks with 'if needed' seminar sessions, the instructor will be available and all groups must attend for a brief 'check-in'. Groups requiring additional assistance should request a meeting. Note that the seminar instructor may also require a meeting with a group.
- 3) Progress report presentations will be held in conjunction with ENGL273 instructors.
- 4) Final presentations will be held on the last two days of the exam period. Presentations will be made to an audience including CIVE289 and ENGL273 instructors, other faculty, invited guests, industry guests and peers.
- 5) This course schedule is subject to change. Please refer to the course website for updates.

7 Basis of Student Assessment

Students must achieve a minimum of 50% on each component in order to pass the course. See Class Policies for additional information.

Component	Weighting %	Comments
Group Marks (75%)		
Project Proposal & Cost Estimate	10	Written report and cost estimate
Interim Progress Report	5	Written report
In-Class Progress Reports	15	Presentations – evaluated in conjunction with ENGL273 instructors
Final Project Report and Drawings	25	Evaluated for technical content
Project Promotional Poster	5	Written – evaluated for technical content
Cost Report	5	Written report with cost estimate update
Final Project Presentation	10	Presentations – evaluated in conjunction with ENGL273 instructors, other faculty, invited industry guests and peers

<i>Component</i>	<i>Weighting %</i>	<i>Comments</i>
Individual Marks (25%)		
Attendance	5	Attendance for lectures and seminars
Accountability Log	20	Assessed for technical content (Students must achieve a minimum of 50% on their accountability logs in order to pass the course)
TOTAL	100	

Note: submissions are evaluated primarily on the basis of innovation, technical quality, completeness and correctness. Deliverables are also assessed in ENGL 273. Please refer to ENGL 273 course outline for details.

8 Required Materials to Assist Students to Succeed Throughout the Course

- a) Texts – no text is required for this course.
- b) Other – course materials posted on student website.

9 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.

10 Grading System

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

See [Camosun Grading Policy E-1.5](#)

11 Class Policies

- Assignments are due at the start of the applicable lecture or seminar session, unless noted otherwise. Late assignments will have 10% deducted.
- You must complete all assignments in order to pass the course. You must pass (>50%) all assignments in order to pass the course.
- Attendance for scheduled lectures and seminars is mandatory. If you plan to miss a session, you must speak directly to the instructor and your other group members prior to the session.
- As you are working in groups, your other group members rely on you to complete your share of the work. Students who repeatedly fail to come to class and fail to make alternate arrangements will be given a failing grade in the course.