



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

**CIVE 289**  
**Civil Capstone**  
**Winter 2020**

## 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   | Robin Ley  |
| Office hours | See instructor's website and postings outside offices  |
| Location     | TEC 267  |
| Phone        | 250-370-3866 (please leave voice message)  |
| E-mail       | <a href="mailto:LeyR@camosun.bc.ca">LeyR@camosun.bc.ca</a>   |
| Website      | <a href="http://civil.camosun.bc.ca/student/">http://civil.camosun.bc.ca/student/</a> , Course D2L |

### 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 –<br>No of Weeks<br>(Q=11; S=14;<br>"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 (see course website and D2L):

| <b>Deliverable</b>                                      | <b>Week</b> | <b>Due Date</b>        |
|---|-------------|------------------------|
| Three Project Ideas                                     | 1           | January 10, 2020       |
| Technical Proposal (with cost proposal)                 | 3           | January 24, 2020       |
| Accountability Log (first submittal, weekly thereafter) | 3           | January 26, 2020       |
| Proposal Presentation                                   | 5           | February 3 & 4, 2020   |
| Accountability Log with Reflection                      | 5           | February 9, 2020       |
| Progress Presentation No. 1                             | 8           | February 24 & 25, 2020 |
| Interim Progress Report                                 | 8           | February 28, 2020      |
| Accountability Log with Reflection                      | 10          | March 15, 2020         |
| Progress Presentation No. 2                             | 11          | March 16 & 17, 2020    |
| Brochure  | 12          | March 27, 2020         |
| Design Report & Drawings                                | 14          | April 9, 2020          |
| Cost Report   | 16          | April 22, 2020         |
| Final Presentation                                      | 16          | April 21 & 22, 2020    |
| Accountability Log with Reflection                      | 16          | April 22, 2020         |

### Notes:

- 1) *There are two weekly lectures and one seminar session for this course. Please check the website for topics and schedule for the lectures and seminars. In addition, groups will be required to meet with their Technical Advisors.*
- 2) *Progress report presentations will be held in conjunction with ENGL273 instructors during the ENGL273 lecture times.*
- 3) *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.*
- 4) *This course schedule is subject to change. Please refer to the course website for updates.*
- 5) *Accountability Logs are due on Sundays by midnight.*

## 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.

| <i>Component</i>                  | <i>Weighting %</i> | <i>Comments</i>  |
|-----------------------------------|--------------------|--|
| <b>Group Marks (75%)</b>          |                    |  |
| Three Project Ideas               | 2                  | Written report   |
| 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 Brochure                  | 3                  | 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              |
| <b>Individual Marks (25%)</b>     |                    |  |
| 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) |
| <b>TOTAL</b>                      | <b>100</b>         |  |

*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 typically due by noon on Friday of the designated week unless otherwise noted. Hard copies will be submitted to the dropbox location in the first floor of TEC. E-copies will be submitted to D2L.
- No late assignments will be accepted without prior academic concession. Students should contact the instructor prior to the due date and request an extension. Instructor may require a doctor's note.
- 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. If you receive >50% on your individual attendance grade you will fail this course. Attendance will be marked out of five points, a point will be deducted for each missed lecture, seminar, or peer presentations. Attendance to all presentations is mandatory.
- 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. All group members will be given the same mark on group assignments except in extreme situations. The instructor may elect to distribute grades differently on group assignments if it is determined that an individual did not adequately contribute to the group assignment. The instructor will meet with the group prior to making this determination and efforts will be made to avoid this situation.
- Both D2L and the CIVE Website will be used for this course. Students are responsible for following directions and checking both sources as well as email correspondence. Refer to student code of conduct.
- 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 the instructor 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>

- Refer to the student code of conduct: <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf>