



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

**CIVE 181 – SUSTAINABILITY PROJECT**  
**W2020**

**COURSE OUTLINE**

**1. Instructor Information**

Instructor	Robin Ley (TEC174), office hours posted
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>

**2. Calendar Description**

Students form teams and brainstorm, develop, design and present an idea for a low-tech project that improves some aspect of sustainability within their community. "Community" can be defined geographically or culturally. The design process, ethics, teamwork, problem solving and design documentation are taught independently of any technical context. Each project is to be designed, drafted, documented and, finally, presented to the other learners in the class.

**3. Prerequisites and Corequisites**

One of:

- C in English 12
- C in English 12 First Peoples
- C in ENGL 091 and ENGL 093
- C in ENGL 092
- C in ENGL 103
- C in ENGL 130
- C in ENGL 142
- C in ELD 092
- C in ELD 097
- C in ELD 103

**4. Intended Learning Outcomes: Upon successful completion of this course a student will be able to:**

- Define the three pillars of sustainability and give examples of how these pillars are currently addressed or could be better addressed within their community.
- Work with a team to generate project ideas that are sustainable and ethical.
- Participate effectively and respectfully in a team activity.
- Identify and appropriately address interpersonal issues within a project team.
- Respond appropriately to ethical issues that arise in the engineering community.
- Design, document and present a design solution.
- Propose urban development options that promote sustainable lifestyle choices.
- Discuss issues affecting governments and development agencies pursuing sustainability in the developed and developing world.

- Create a Gantt chart, a precedence network and perform a critical path analysis in order to execute a project that meets required deadlines.

## **5. Required Materials**

Optional Textbook – Fundamental Competencies for the 21-st Century Engineer, Dunwoody 2006  
Readings – posted on course website

**6. Course Content and Schedule (subject to change, check website for up to date schedule, due dates found on website are current and final)**

<i>Week</i>	<i>Week Starting (Monday)</i>	<i>Lecture - Thursdays</i>	<i>Seminar - Fridays</i>	<i>Assignments Due (all assignments are due on Monday by 4:30 pm, hard copy or e-copies as defined in the assignment, unless otherwise noted )</i>
1	Jan-6	No Lecture due to Holiday	Introduction to Sustainability	
2	Jan-12	Dream Big Design Challenge	Dream Big Design Challenge	
3	Jan-20	Course Outline – class policies  Project Ideas (ideas, expectations)  Brainstorming  Interconnectivity	Form Teams, Individual Teamwork Questionnaire, Team Summary, Assignment 1	
4	Jan-27	Project Management - Basics, Design Process, Schedules	Project Discussions with Instructor, Teamwork Pyramid, Team Goals, Assignment 2	
5	Feb-3	Sustainability & Ethics	Teamwork Pyramid, Meeting Minutes, Assignment 3	Assignment 1 (MB, Learning Due)
6	Feb-10	Green Building Design	Teamwork Pyramid, Assignment 4 and Project Feedback,	Assignment 2 (Project Ideas Due)
7	Feb-17	Reading Break	Reading Break	Assignment 3 (Project Research Due – consider submitting early before reading break)
8	Feb-24	Project Management Cont.	Project Work, Assignment 5, Teamwork Pyramid, Assignment 6	Assignment 4 (Design Criteria Due)
9	Mar-2	Life Cycle Assessment	Instructor Meetings, Project Work, Assignment 7	Assignment 4 (Design Criteria Due)  Team Project Feedback due during meetings
10	Mar-9	New Urbanism	Project Work	Assignment 5 (Gant Charts) due
11	Mar-16	Energy	Project Work	Assignment 6 (Interconnectivity) due
12	Mar-23	Energy	Instructor Group Meetings, Project Work	Assignment 7 (Project Status Report) due
13	Mar-30	Presentation Tips		Assignment 8 (Personal Reflection) due Monday, Final Reports Due – April 3, 2020 (by 3:30 pm)
14	Apr-6	Group Presentations	No Class (Good Friday)	

## 7. Student Assessment

Task	Individual	Group
<b>Quizzes and Meetings</b>	<b>15%</b>	
Quizzes	10%	
Instructor Meeting - Midterm	2.5%	
Instructor Meeting - Final	2.5%	
<b>Assignments</b>	<b>20%</b>	<b>25%</b>
Ass 1 - Myers-Brigg and LSI	5%	
Ass 2 - Three Feasible Project Ideas		5%
Ass 3 - Project Research	5%	
Ass 4 - Design Criteria for Project		5%
Ass 5 - Gantt and Network Diagram	5%	
Ass 6 - Life Cycle Map		5%
Ass 7 - Project Status Report		10%
Ass 8 - Personal Reflection	5%	
Final Presentation		<b>10%</b>
Final Report		<b>30%</b>
	SUBTOTAL	35% 65%
	TOTAL	<b>100%</b>

## 8. Grading System

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

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

## 9. Class Policies

- You must participate in the final presentation to pass the course.
- Assignments are due by 4:30pm on Monday 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.
- Full attendance in lectures and seminars is expected. Due to the nature of this course your attendance or lack of attendance can negatively affect your teammates. If students need to miss a class or lecture they should get in touch with their group to find out what materials have been missed before the missed class. Students can also email the instructor if needed. Note: that no make-up quizzes will be given.
- All group members will be given the same mark on group assignments with the exception of Assignment 6 and 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>