



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

**CIVE 181 – SUSTAINABILITY PROJECT  
F2019**

**COURSE OUTLINE**

**1. Instructor Information**

Instructor	Robin Ley
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)

<b>Week</b>	<b>Week Starting (Monday)</b>	<b>Lecture</b>	<b>Seminar</b>	<b>Assignments Due</b> (all assignments are due on Friday by 3:30, hard copy to dropbox)
1	02-Sep	<i>Introduction to Sustainability</i>	<i>No Seminars due to Holiday</i>	
2	9-Sep	<i>Dream Big Design Challenge</i>	<i>Dream Big Design Challenge</i>	
3	16-Sep	<i>Myers Briggs Assessment, Effective Brainstorming, Interconnectivity</i>	<i>Form Teams, Individual Teamwork Questionnaire, Team Summary, Assignment 1</i>	
4	23-Sep	<i>Project Management - Basics, Design Process, Schedules</i>	<i>Project Discussions with Instructor, Teamwork Pyramid, Team Goals, Assignment 2</i>	<i>Assignment 1 (MB, Learning Due)</i>
5	30-Sep	<i>Sustainability Topic - Energy</i>	<i>Teamwork Pyramid, Meeting Minutes, Assignment 3</i>	<i>Assignment 2 (Project Ideas Due)</i>
6	07-Oct	<i>Teamwork Pyramid, Assignment 4 and Project Feedback, Instructor Meeting signup</i>	<i>No Seminars due to Holiday</i>	<i>Assignment 3 (Project Research Due)</i>
7	14-Oct	<i>Sustainability &amp; Ethics</i>	<i>Instructor Meetings, Project Work, Assignment 5</i>	<i>Assignment 4 (Design Criteria Due)</i>
8	21-Oct	<i>Life Cycle Assessment</i>	<i>Teamwork Pyramid, Assignment 6</i>	<i>Team Project Feedback due during meetings</i>
9	28-Oct	<i>Green Building Design</i>	<i>Project Work, Assignment 7</i>	<i>Assignment 5 (Gant Charts) due</i>
10	04-Nov	<i>Field Trip</i>	<i>Project Work, Assignment 8</i>	<i>Assignment 6 (Interconnectivity) due</i>
11	11-Nov	<i>New Urbanism</i>	<i>No Seminars due to Holiday</i>	<i>Assignment 7 (Project Status Report) due</i>
12	18-Nov	<i>Food &amp; Sustainability</i>	<i>Instructor Group Meetings, Project Work</i>	<i>Assignment 8 (Personal Reflection) due</i>
13	25-Nov	<i>Presentation Preparation</i>	<i>Presentation Tips</i>	<b>Final Reports Due - Friday November 29th at 3:30</b>
14	02-Dec	<i>Group Presentations</i>	<i>Group Presentations</i>	

## 7. Student Assessment

<b>Task</b>	<b>Individual</b>	<b>Group</b>
<b>Quizzes and Meetings</b>	<b>15%</b>	
Quizzes	5%	
Instructor Meeting - Midterm	2.5%	
Instructor Meeting - Final	2.5%	2.5%
Individual Presentations on Sustainability Topic	5.0%	
<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	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

- Assignments are due by 3:30pm on Friday of the designated week.
- No late assignments will be accepted without academic concession.
- Full attendance in lectures and seminars is expected.