



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

CIVE 181 – SUSTAINABILITY PROJECT
F2017

COURSE OUTLINE

1. Instructor Information

Instructor	Robin Ley
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Website	http://civil.camosun.bc.ca/student/

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

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)

Week	Week Starting (Monday)	Lecture	Seminar	Assignments Due (all assignments are due at the beginning of the lecture period unless otherwise noted)
		Section 0X1 –Weds 3:30 - 5:20 Section 0X2 - Thursday 8:30 - 10:20	Section A – Weds 10:30 - 12:20, Section B - Mon 8:30 - 10:20, Section C&D - Tues 2:30 - 4:30	
1	03-Sep	Introduction to Sustainability	No Seminars due to Holiday	
2	10-Sep	Dream Big Design Challenge	Dream Big Design Challenge	
3	17-Sep	Myers Briggs Assessment, Effective Brainstorming, Interconnectivity	Form Teams, Individual Teamwork Questionnaire, Team Summary, Assignment 1	
4	24-Sep	Project Management - Basics, Design Process, Schedules	Project Discussions with Instructor, Teamwork Pyramid, Team Goals, Assignment 2	Assignment 1 (MB, Learning Due)
5	01-Oct	Sustainability Topic - Energy	Teamwork Pyramid, Meeting Minutes, Assignment 3	Assignment 2 (Project Ideas Due)
6	08-Oct	Teamwork Pyramid, Assignment 4 and Project Feedback, Instructor Meeting signup	No Seminars due to Holiday	Assignment 3 (Project Research Due)
7	15-Oct	Sustainability & Ethics	Instructor Meetings, Project Work, Assignment 5	Assignment 4 (Design Criteria Due)
8	22-Oct	Life Cycle Assessment	Teamwork Pyramid, Assignment 6	Team Project Feedback due during meetings
9	29-Oct	Green Building Design	Project Work, Assignment 7	Assignment 5 (Gant Charts) due
10	05-Nov	Field Trip	Project Work, Assignment 8	Assignment 6 (Interconnectivity) due
11	12-Nov	New Urbanism	No Seminars due to Holiday	Assignment 7 (Project Status Report) due
12	19-Nov	Food & Sustainability	Instructor Group Meetings, Project Work	Assignment 8 (Personal Reflection) due
13	26-Nov	Presentation Preparation	Presentation Tips	Final Reports Due - Friday November 30th at 4:30
14	03-Dec	Group Presentations	Group Presentations	

7. Student Assessment

Task	Individual	Group
Quizzes and Meetings	15%	
Quizzes	5%	
Instructor Meeting - Midterm	2.5%	
Instructor Meeting - Final	2.5%	2.5%
Individual Presentations on Sustainability Topic	5.0%	
Assignments	20%	25%
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		10%
Final Report		30%
	SUBTOTAL	65%
	TOTAL	100%

8. Grading System

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

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

9. Class Policies

- Assignments are due at the start of the lecture period unless otherwise noted on the course website.
- No late assignments will be accepted without academic concession.
- Full attendance in lectures and seminars is expected.