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

**CIVE 181 – SUSTAINABILITY PROJECT**
**F2020**

# COURSE OUTLINE

## 1. Instructor Information

| | |
|---|---|
| Instructor | Robin Ley (working remotely), see D2L |
| E-mail | LeyR@camosun.bc.ca |
| Website | Online.camosun.bc.ca/d2l |

## 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

Course materials will be posted on D2L site. No textbook required.

## 6. **Course Content and Schedule –** changes will be posted on D2L

| Week | Week Starting (Monday) | Lecture – recorded (available on Wednesday) | Seminar – see schedules | Assignments Due (all assignments are due on Friday by 3:30 submitted through D2L ) |
|---|---|---|---|---|
| 1 | Sep - 7 | Introduction to Sustainability<br><br>Course Outline – class policies | No Seminar due to Holiday | |
| 2 | Sep - 14 | Teamwork In Engineering | Team Building Exercise | |
| 3 | Sep - 21 | Project Ideas (ideas, expectations)<br><br>Interconnectivity<br><br>Brainstorming | Ice Breakers<br><br>Brainstorming<br><br>Form Teams, Individual Teamwork Questionaire, Team Summary, Assignment 1 | |
| 4 | Sep - 28 | Project Management - Basics, Design Process, Schedules | Project Discussions with Instructor, Teamwork Pyramid, Team Goals, Assignment 2 | Assignment 1 (MB, Learning Due) |
| 5 | Oct - 5 | Sustainability & Ethics | Teamwork Pyramid, Meeting Minutes, Assignment 3 | Assignment 2 (Project Ideas Due) |
| 6 | Oct - 12 | Green Building Design | No Seminar due to Holiday | |
| 7 | Oct - 19 | Sustainability During a Pandemic | Teamwork Pyramid, Assignment 4 and Project Feedback, | Assignment 3 (Project Research Due) |
| 8 | Oct - 26 | Project Management Cont. | Project Work, Assignment 5, Teamwork Pyramid, Assignment 6 | Assignment 4 (Design Criteria Due) |

| | | | | Team Project Feedback due during meetings |
|---|---|---|---|---|
| 9 | Nov - 2 | Life Cycle Assessment | Instructor Meetings, Project Work, Assignment 7 | Assignment 5 (Gant Charts) due |
| 10 | Nov - 9 | New Urbanism | No Seminar due to Remembrance Day | Assignment 6 (Interconnectivity) due |
| 11 | Nov - 16 | Progress Report Tips | Project Work | Assignment 7 (Project Status Report) due |
| 12 | Nov - 23 | Energy | Instructor Group Meetings, Project Work | |
| 13 | Nov - 30 | Presentation Tips | | **Final Reports Due – Dec. 4 (by 3:30 pm)** |
| 14 | Dec - 7 | Group Presentations | No Seminars – view group presentations | Assignment 8 (Personal Reflection) due |

## 7. Student Assessment

| Task | Individual | Group |
|---|---|---|
| **Quizes and Meetings** | **15%** | |
| Quizzes | 10% | |
| Seminar Attendance | 5% | |
| 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 | 35% | 65% |
| TOTAL | | **100%** |

## 8. Grading System
☒ *Standard Grading System (GPA)*
☐ *Competency Based Grading System*

*See Camosun Grading Policy E-1.5*

## 9. Class Policies

- This is an online course with both synchronized (live attendance required) and asynchronized (recorded) components.  The seminar sessions will be synchroized and conducted through D2L collaborate.  Students should review their schedules and understand when they have seminar. Attendance is required for seminars and will be a component of your final grade.  Students that need to miss seminar for medical reasons should inform the instructor prior to missing the class (if possible).  The lecture component of this course will be recorded and posted to D2L by Wednesday of each week.  Students can decide when they complete the lecture component but students are advised that course content must be completed on a weekly basis. Weekly quizzes will be given related to the lecture material.  The instructor will be available online during office hours (or as otherwise arranged) to assist students.

- Due to the nature of this course, significant emphasis is placed on assignments, participation in seminars, and quizzes.  Students should anticipate that substantial effort is be required to complete assignments and plan accordingly.  Assignments should be professionally presented (even in electronic form). The student code of conduct is in place and will be referred to as needed.

- Assignments are due as noted on the D2L site.  All assignments will be submitted electronically through D2L.  Late assignments will have 10% deducted per day the assignment is late (including weekends).  Assignments submitted after graded assignments have been returned or solutions are posted are worth zero. Note, assignments will be graded and returned quickly, so students submitting late assignments run the risk of receiving a zero grade.  Students will have a significant amount of time between assignment due dates and should plan accordingly. Assignments will take a substantial effort.  Students attempting to complete assignments close to the due date are unlikely to be successful and extensions will not be giving for technical issues or lack of planning or prioritizing.  No extension will be given after or on the due date.

- 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.

- Camosun's D2L site will be used for this course.  Students are responsible for following directions and checking the website 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