



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

CIVE 282
Managing Construction Projects
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

Instructors: Peter Fell, P.Eng.
Office hours: See course website and office door for posting
Location: Tec 108
Phone: 250-370-4483
E-mail: fellp@camosun.bc.ca
Website: <http://civil.camosun.bc.ca/student/>

2 Prerequisites and Corequisites

Prerequisite: 'C' in CIVE 181

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 – No of Weeks
3	14
1	14

Credits = 3

4 Short Description

Students are introduced to aspects of civil and contract law, codes, regulations and bylaws as they apply to the contracting process. Topics covered include contract documents, tendering procedures and contract administration as they relate to a civil engineering construction project. Computer software will be used for critical path analysis, scheduling the construction process, cost control, quantity estimating and quality control procedures. Construction site safety and security are covered.

5 Intended Learning Outcomes

Upon successful completion of this course, students will be able to:

- Apply the legal principles of contract law, intellectual property law and tort liability to the engineering projects.

- Compare types of laws and the relationships between Federal, Provincial and local jurisdictions.
- Discuss and interpret the acts, regulations and code of ethics that govern professional engineers and technologists.
- Compare the various types of business relationships typically found in design and construction.
- Describe the preparation of a set of construction contract documents and the administration of the bidding process.
- Propose how to fulfill contract administration duties such as: site inspections; progress payments; change orders; extras; and record keeping.
- Prepare project schedules and manage resources using project management software.
- Perform a quantity take-off, apply unit prices, and overhead and profit amounts to develop a construction cost estimate or bid amount.
- Evaluate equipment for a job based on productivity requirements.
- Describe safety requirements on the jobsite and in the workplace including general requirements, Workplace Hazardous Materials Information System (WHMIS), transportation of dangerous goods, traffic control, confined space entry and fall arrest.

6 Course Content and Schedule

- a. Refer to the course website for course content and updates to the schedule. This course consists of three hours of lecture and one hour lab per week.
- b. Lectures are as follows:
 - i. Monday 10:30am to 11:50am in TEC 173
 - ii. Thursday 12:30 to 1:50pm in TEC 181
- c. Labs are as follows:
 - i. Section X01A (Group A) Wednesday 8:30 to 9:20am - TEC 151
 - ii. Section X01B (Group B) Tuesday 2:00 to 2:50pm - TEC 150
 - iii. Section X01C (Group C) Wednesday 11:30am to 12:20pm - TEC 151

<i>Week</i>	<i>Lecture Topic</i>	<i>Lab</i>
1	Course Introduction, Construction Scheduling	Introduction to MS Project
2	Canadian Legal System / Case Studies	MS Project
3	Tort Law	MS Project
4	Contract Law	MS Project (Catch-up)
5	Engineering Law / Environmental Law / Employment Law	Review for Mid-term
6	Mid-Term Exam / Guest Lecturer – IP	Construction Scheduling
7	Reading Break – No lectures	No labs
8	Introduction to Contract Documents and Construction Administration	Construction Scheduling
9	Tender and Contract Documents	Construction Documents
10	Contract Administration	Construction Administration
11	Guest Lecturer – MMCD Construction Administration	No lab
12	Construction Cost Estimating	Construction Cost Estimating
13	Construction Cost Estimating	Construction Cost Estimating
14	Construction Safety	Review for Final
15	Exam Week (Final exam)	

7 Basis of Student Assessment

<i>Component</i>	<i>Weighting %</i>	<i>Comments</i>
Assignments	20	Assignments, submitted individually, unless otherwise noted. Four substantial assignments are anticipated. Due dates will be identified for each assignment
Labs	15	Lab assignments, submitted individually, unless otherwise noted. Three lab assignments are anticipated. Due dates will be identified for each lab.
Mid-term exam	20	Closed book, 1.5-hr duration. Held during Week 8.
Final exam	40	Closed book, 3-hr duration. Held during exam week.
Other	5	Instructor assessment based upon attendance, cooperation, participation, not submitting plagiarized work, etc.
TOTAL	100	

8 Required Materials to Assist Students to Succeed Throughout the Course

- a) Texts – there is no text for this course.
- b) Other
 - i. Broom Z., Fell P., Ley R., *CIVE282 Managing Construction Projects – Course Notes, Camosun College, 2020* (handouts posted to website)
 - ii. Other references and handouts posted on the course web site

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 and labs are due at the start of the applicable lecture or lab period, unless otherwise noted. Late assignments and labs will have 10% deducted. Assignments and labs submitted after graded assignments and labs have been returned or solutions are posted are worth 0.
- You must complete all assignments and labs prior to the final exam in order to be permitted to write the final exam
- You must achieve 50% on the final exam in order to pass the course. In addition, a weighted average of 50% on the mid-term and final exam must be achieved in order to pass the course.
- A minimum of 60% (C) must be achieved in the course in order to gain credit for the purpose of continuing to courses for which this course is a prerequisite.
- Attendance for the lectures and labs is included as part of the instructor assessment portion of your final grade. Attendance for the lectures is expected and for labs is mandatory. If you plan to or do miss a lecture or lab you must speak to the instructor.
- 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 me 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>