

COURSE SYLLABUS



COURSE TITLE: CIVE 282 – MANAGING CONSTRUCTION PROJECTS
CLASS SECTION: X01A and X01B
TERM: 2022W
COURSE CREDITS: 3
DELIVERY METHOD(S): Lecture and Computer Lab

Camosun College campuses are located on the traditional territories of the Lək̓ʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here.
Learn more about Camosun's [Territorial Acknowledgement](#).

For COVID-19 information please visit <https://legacy.camosun.ca/covid19/index.html>.

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable explanation in advance, you will be removed from the course and the space offered to the next waitlisted student.

INSTRUCTOR DETAILS

NAME: Peter Fell
EMAIL: fellp@camosun.bc.ca
OFFICE: TEC 108
HOURS: See office door

As your course instructor, I endeavour to provide an inclusive learning environment. However, if you experience barriers to learning in this course, do not hesitate to discuss them with me. Camosun College is committed to identifying and removing institutional and social barriers that prevent access and impede success.

CALENDAR 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.

PREREQUISITE(S): All of: C in CIVE 181
PRE or CO-REQUISITE(S): none
EXCLUSION(S): none

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon successful completion of this course a student 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.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- There is no required text for this course.
- Lecture notes, videos and other supporting material posted on course web pages.

COURSE SCHEDULE, TOPICS, AND ASSOCIATED PREPARATION / ACTIVITY / EVALUATION

The following schedule and course components are subject to change with reasonable advance notice, as deemed appropriate by the instructor.

Lectures are as follows:

- Tuesday 8:30 AM - 9:50 AM in TEC 177
- Wednesday 12:30 PM - 1:50 PM in TEC 181

Labs are as follows:

- X01A: Monday 1:00 PM - 1:50 PM in TEC 151
- X01B: Friday 8:30 AM - 9:20 AM in TEC 257

| WEEK | DATE RANGE | LECTURE TOPICS | LAB |
|------|----------------|--|---|
| 1 | Jan 10 – 14 | Course Introduction / Construction Scheduling | X01B: Construction Scheduling / Intro to MS Project |
| 2 | Jan 17 – 21 | Canadian Legal System / Case Studies | X01A: Construction Scheduling / Intro to MS Project X01B: MS Project - Resources |
| 3 | Jan 24 – 28 | Tort Law | X01A: MS Project - Resources X01B: MS Project – Resource Allocation / Levelling |
| 4 | 31 Jan – 4 Feb | Contract Law | X01A: MS Project – Resource Allocation / Levelling X01B: MS Project (Catch-up) |
| 5 | Feb 7 - 11 | Engineering Law / Environmental Law / Employment Law | X01A: MS Project (Catch-up) X01B: Construction Scheduling – Misc. |
| 6 | Feb 14 - 18 | Review for Mid-term / Guest Lecturer – Intellectual Property | X01A: Construction Scheduling – Misc. X01B: No Lab |
| 7 | Feb 21 - 25 | Reading Break – No lectures | No Labs |

| WEEK | DATE RANGE | LECTURE TOPICS | LAB |
|-------|----------------|--|--|
| 8 | Feb 28 – Mar 4 | Mid-Term Exam / Introduction to Contract Documents and Construction Administration | X01A: No lab X01B: Construction Documents |
| 9 | Mar 7 - 11 | Tender and Contract Documents | X01A: Construction Documents X01B: Tenders |
| 10 | Mar 14 - 18 | Contract Administration | X01A: Tenders X01B: Construction Administration |
| 11 | Mar 21 - 25 | Guest Lecturer – MMCD Construction Administration | X01A: Construction Administration X01B: Construction Cost Estimating - Intro |
| 12 | Mar 28 – Apr 1 | Construction Cost Estimating – Intro, Steel, Concrete, Wood | X01A: Construction Cost Estimating – Intro X01B: Construction Cost Estimating – Methods |
| 13 | Apr 4 - 8 | Construction Cost Estimating – Excavation, Overhead & Profit | X01A: Construction Cost Estimating – Methods X01B: Construction Cost Estimating – Methods |
| 14 | Apr 11 - 15 | Construction Safety / Review for Final | X01A: Construction Cost Estimating – Methods X01B: No lab |
| 15/16 | April 19 - 27 | Final Exam (details to be announced) | |

Students registered with the Centre for Accessible Learning (CAL) who complete quizzes, tests, and exams with academic accommodations have booking procedures and deadlines with CAL where advanced notice is required. Deadlines can be reviewed on the CAL exams page. <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

| DESCRIPTION | WEIGHTING | Notes |
|-----------------------|-----------|--|
| Assignments | 10% | Assignments submitted individually, unless otherwise noted. |
| Labs | 15% | Labs, submitted individually, unless otherwise noted. |
| Mid Term | 20% | Closed book, 1.5hr duration |
| Final Exam | 40% | Closed book, 3hr duration |
| Online Discussions | 10% | Discussion topics (held online in D2L) |
| Instructor Evaluation | 5% | Based on attendance, cooperation, participation, not submitting plagiarized work, etc. |
| TOTAL | 100% | |

If you have a concern about a grade you have received for an evaluation, please come and see me as soon as possible. Refer to the [Grade Review and Appeals](#) policy for more information.

<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

- 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 after solutions have been 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 an average of 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.
- Presence is required for all scheduled course components. Attendance for the lectures and labs is included as part of the instructor assessment portion of your final grade. If you plan to or do miss a lecture or lab you must speak to the instructor.

SCHOOL OR DEPARTMENTAL INFORMATION

Department:

- Civil Engineering Department. Chair is Zoe Broom, TEC 116.
- See the chair if you need:
 - program help such as working out a part-time schedule
 - help with transfer credits
 - info on services from other departments.

See your instructor if you need help with the course.

School:

- School of Trades and Technology. Office TEC 169
- Dean is Eric Sehn
- Associate Dean is Ken Kosik
- Both are in TEC 169
- Student issues are looked after by the Associate Dean. However, if you need anything, go to the department chair first.

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>

STUDENT RESPONSIBILITY

Enrolment at Camosun assumes that the student will become a responsible member of the College community. As such, each student will display a positive work ethic, assist in the preservation of College property, and assume responsibility for their education by researching academic requirements and policies; demonstrating courtesy and respect toward others; and respecting expectations concerning attendance, assignments, deadlines, and appointments.

SUPPORTS AND SERVICES FOR STUDENTS

Camosun College offers a number of services to help you succeed in and out of the classroom. For a detailed overview of the supports and services visit <http://camosun.ca/students/>.

| Support Service | Website |
|-------------------------------------|---|
| Academic Advising | http://camosun.ca/advising |
| Accessible Learning | http://camosun.ca/accessible-learning |
| Counselling | http://camosun.ca/counselling |
| Career Services | http://camosun.ca/coop |
| Financial Aid and Awards | http://camosun.ca/financialaid |
| Help Centres (Math/English/Science) | http://camosun.ca/help-centres |
| Indigenous Student Support | http://camosun.ca/indigenous |
| International Student Support | http://camosun.ca/international/ |
| Learning Skills | http://camosun.ca/learningskills |
| Library | http://camosun.ca/services/library/ |
| Office of Student Support | http://camosun.ca/oss |
| Ombudsperson | http://camosun.ca/ombuds |
| Registration | http://camosun.ca/registration |
| Technology Support | http://camosun.ca/its |
| Writing Centre | http://camosun.ca/writing-centre |

If you have a mental health concern, please contact Counselling to arrange an appointment as soon as possible. Counselling sessions are available at both campuses during business hours. If you need urgent support after-hours, please contact the Vancouver Island Crisis Line at 1-888-494-3888 or call 911.

COLLEGE-WIDE POLICIES, PROCEDURES, REQUIREMENTS, AND STANDARDS

Academic Accommodations for Students with Disabilities

The College is committed to providing appropriate and reasonable academic accommodations to students with disabilities (i.e. physical, depression, learning, etc). If you have a disability, the [Centre for Accessible Learning](http://camosun.ca/services/accessible-learning/) (CAL) can help you document your needs, and where disability-related barriers to access in your courses exist, create an accommodation plan. By making a plan through CAL, you can ensure you have the appropriate academic accommodations you need without disclosing your diagnosis or condition to course instructors. Please visit the CAL website for contacts and to learn how to get started:

<http://camosun.ca/services/accessible-learning/>

Academic Integrity

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.13.pdf> for policy regarding academic expectations and details for addressing and resolving matters of academic misconduct.

Academic Progress

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.1.pdf> for further details on how Camosun College monitors students' academic progress and what steps can be taken if a student is at risk of not meeting the College's academic progress standards.

Course Withdrawals Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <http://camosun.ca/learn/fees/#deadlines>.

Grading Policy

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

Mandatory Attendance for First Class Meeting of Each Course

Camosun College requires mandatory attendance for the first class meeting of each course. If you do not attend, and do not provide your instructor with a reasonable reason in advance, you will be removed from the course and the space offered to the next waitlisted student. For more information, please see the "Attendance" section under "Registration Policies and Procedures" (<http://camosun.ca/learn/calendar/current/procedures.html>) and the Grading Policy at <http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.5.pdf>.

Medical / Compassionate Withdrawals

Students who are incapacitated and unable to complete or succeed in their studies by virtue of serious and demonstrated exceptional circumstances may be eligible for a medical/compassionate withdrawal. Please visit <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.8.pdf> to learn more about the process involved in a medical/compassionate withdrawal.

Sexual Violence and Misconduct

Camosun is committed to creating a campus culture of safety, respect, and consent. Camosun's Office of Student Support is responsible for offering support to students impacted by sexual violence. Regardless of when or where the sexual violence or misconduct occurred, students can access support at Camosun. The Office of Student Support will make sure students have a safe and private place to talk and will help them understand what supports are available and their options for next steps. The Office of Student Support respects a student's right to choose what is right for them. For more information see Camosun's Sexualized Violence and Misconduct Policy: <http://camosun.ca/about/policies/education-academic/e-2-student-services->

and-support/e-2.9.pdf and camosun.ca/sexual-violence. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-3703841

Student Misconduct (Non-Academic)

Camosun College is committed to building the academic competency of all students, seeks to empower students to become agents of their own learning, and promotes academic belonging for everyone. Camosun also expects that all students to conduct themselves in a manner that contributes to a positive, supportive, and safe learning environment. Please review Camosun College's Student Misconduct Policy at <http://camosun.ca/about/policies/education-academic/e-2-student-services-and-support/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Changes to this Syllabus: Every effort has been made to ensure that information in this syllabus is accurate at the time of publication. The College reserves the right to change courses if it becomes necessary so that course content remains relevant. In such cases, the instructor will give the students clear and timely notice of the changes.