

COURSE SYLLABUS



COURSE TITLE:	CIVE 255 – MUNICIPAL DESIGN
CLASS SECTION:	X01A and X01B
TERM:	2022F
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:	Zoë Broom
EMAIL:	zbroom@camosun.ca
OFFICE:	TEC 116
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 municipal engineering design procedures through the creation of a land development project. Concept plans are created and critiqued for best fit to the site considering relevant government regulations and selected best practices. Detailed design is documented and drawings are produced for road, storm, sanitary, and water.

PREREQUISITE(S):	All of: C in CIVE 132; C in CIVE 152
PRE or CO-REQUISITE(S):	All of: C in CIVE 271; C in CIVE 276
EXCLUSION(S):	none

COURSE LEARNING OUTCOMES / OBJECTIVES

Upon successful completion of this course a student will be able to:

- Review site characteristics and propose a development (or redevelopment) appropriate for the site considering legal, social, economic and environmental objectives.
- Discuss the benefits and challenges of creating green / sustainable developments as defined by current green development practices.

- Design and draft municipal site servicing for road design, storm water management, sanitary sewage collection, and water distribution, while also allowing space for works designed by others such as gas and electrical works.
- Create a set of municipal drawings that conform to prescribed drafting standards and practices.
- Use suitable specialized software for design of municipal services.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- Lecture notes and videos posted on course web pages
- External websites such as the Saanich online GIS website
- AutoDesk Civil 3D is installed in the labs. I recommend you download and install most current version of Civil 3D on your home computer, available free from AutoDesk
<https://www.autodesk.com/education/edu-software/overview>
- AutoDesk Civil 3D Help pages <https://knowledge.autodesk.com/support/civil-3d>

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.

WEEK	DATE RANGE	LAB 1 TOPIC	LECTURE TOPIC	LAB 2 TOPIC	ASSIGNMENT
		<i>X01A: Tuesdays 12:30 – 2:30 in TEC 151</i> <i>X01B: Mondays 10:30 – 13:30 in TEC 147-8</i>	<i>Thursdays 8:30 – 10:30 in TEC 177</i>	<i>X01A: Fridays 10:30 – 12:30 in TEC 148</i> <i>X01B: Fridays 3:30 – 5:30 in TEC 147-8</i>	
1	Sept 5 – 9	Sept 5 is Labour Day	Course Introduction	Intro to C3D menus, entity types and properties	
2	Sept 12 – 16	Site visit – Cedar Hill Golf Course	Horizontal and vertical road design for subdivision roads	Using the Saanich GIS / mapping and legal descriptions / spatial reference systems/ BC One-Call / Assembling Existing Plan View - using existing data sources	
3	Sept 19 – 23	Creating existing ground surface	OCPs, zoning, and the development process	Horizontal Road Layout	
4	Sept 26 – 30	Vertical Road Design	Alternate development approaches	Sept 30 is National Day for Truth and Reconciliation, no labs	Assignment 1 - Alternate Philosophies
5	Oct 3 – 7	Edge of pavement	Municipal design drawings	Surface modelling - TIN, Grid and breaklines, finished	Assignment 2 - submit dwg with road complete

				ground surface modelling	
6	Oct 10 – 14	Oct 10 is Thanksgiving Day, no lab for X01B	gravity collection system design (san and storm)	Continue with FG surface modelling	Assignment 3 – Storm Water Management
7	Oct 17 – 21	Parcel Design	Midterm Test	Civil 3D labels and styles	
8	Oct 24 – 28	Gravity Pipe network, design and layout, parts catalog, for sanitary and storm networks	Calculating sanitary flow rates	Using a spreadsheet to size sanitary mains	
9	Oct 31 – Nov 4	Using a spreadsheet to size storm mains	Sewage Lift Stations	Feature lines and Grading Parking lots	Assignment 4 - Parking lot and grading
10	Nov 7 – 11	Finish gravity main layout	Watermains	Nov 11 is Remembrance Day, no labs	
11	Nov 14 – 18	Water main networks	Working with Indigenous Services Canada	Water main networks	
12	Nov 21 – 25	Assembling drawings and plotting plan profiles	Cost Estimates	Assembling drawings and plotting plan profiles	
13	Nov 28 – Dec 2	Finish Drawing set	Review	Finish Drawing set	
14	Dec 5 – 9	Finish Drawing set		Drawings due	
15	Dec 12 – 18	Exam Week - Yes, there will be an exam in this course			

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 noticed is required. Deadlines scan be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Assignments	25%
Mid-Term Test	15%
Final Drawings	30%

DESCRIPTION	WEIGHTING
Final Exam	30%
	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](http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf) policy for more information.
<http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf>

COURSE GUIDELINES & EXPECTATIONS

- Presence is required at all scheduled course components.
- Late assignments will have 10% deducted. Assignments submitted after graded assignments have been returned are worth 0.
- You must pass both the final exam and the final drawing submission to pass the course even if your overall score in the course is over 60%.

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](#) (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.