



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

CIVE 255
Municipal Design
Fall 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	Zoe Broom and Peter Fell		
Office hours	See posted schedules		
Location	TEC 105 and 116		
Zoe's Phone	250-370-4512	Peter's Phone	250-370-4483
E-mail	zbroom@camosun.bc.ca and FellP@camosun.bc.ca		
Website	http://civil.camosun.bc.ca/student/ and D2L		

2 Prerequisites and Corequisites

- C in CIVE 152 (or CIVL 146)
- C in CIVE 132 (or CIVL 133)
- Pre-co: CIVE 276 (or CIVL 276)
- Pre-co: CIVE 271 (or ENGR 177)

3 Hours and Credits

Course Activity

- Lecture (Direct Instruction)
- Seminar (Direct Instruction)
- Lab /Collaborative Learning
- Other*(please note):

Hours / Week	Instruction – No of Weeks (Q=11; S=14; "P or S" = 7)
2	14
4	14

Credits = 4

4 Short 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.

5 Intended Learning Outcomes

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.

6 Required Materials

- a) Texts – recommended: A Civil 3D reference book
- b) Other – material posted on course web pages

7 Course Content and Schedule

Week	Lecture	Lab
1	Course Introduction	Intro to C3D menus, entity types and properties site visit
2	OCPs, zoning, and the development process	Using the Saanich GIS / mapping and legal descriptions / spatial reference systems/ BC One-Call / Assembling Existing Plan View - Property, services, roads topography, surface water, features and constraints (using existing imagery and vectors)
3	Road design - Horizontal	Horizontal Road Design
4	Road design – Vertical design and drainage	Vertical Road
5	Municipal Design Drawings	Parcel Design
6	Thanksgiving – no lecture	Surface modelling - TIN, Grid and breaklines, generating contours of finished ground
7	Sanitary Flow Rates	Continue with surface modelling
8	Midterm Test; sanitary collection system design	Gravity Pipe network, design and layout, parts catalog, for sanitary and storm networks
9	using a spreadsheet to size sanitary mains	Continue previous week
10	using a spreadsheet to design storm mains	Water main networks
11	Cost Estimates	Feature lines and Grading Parking lots
12	Working with Indian Affairs	Assembling drawings and plotting plan profiles
13	alternate development approaches	Finish Drawing set
14	review	Drawings due

15	Exam Week	Yes, there is an exam in this course
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8 Student Assessment

<i>Component</i>	<i>Weighting %</i>	<i>Comments</i>
Assignments	20	
Mid-term Test	15	
Final Drawings	30	
Final Exam	25	
Instructor Evaluation	10	Attendance and participation
TOTAL	100	

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 A Safe Place for EVERYONE

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>

12 Class Policies

- 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%.