

COURSE SYLLABUS



COURSE TITLE: CIVE 141
CLASS SECTION: X01A, X01B, X01C
TERM: 2023F
COURSE CREDITS: 3
DELIVERY METHOD(S): Lecture, Labs

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](#).

INSTRUCTOR DETAILS

NAME: Stephen Cowden
EMAIL: cowdens@camosun.ca
OFFICE: TEC 105
HOURS: Mondays 10:30pm to 11:30pm

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 learn the care and use of survey equipment for the collection of land and construction site measurements as typically used in civil engineering projects. Surveying skills acquired include: field book set up; level loop and traverse definition, measurement and balancing; use of an automatic level and a total station to enable collection documentation of elevations and topographic data.

PREREQUISITE(S): C in one of: Pre-calculus 12, Math 097, Math 107 or Math 115
CO-REQUISITE(S): CIVE 131
EXCLUSION(S): None

COURSE LEARNING OUTCOMES / OBJECTIVES

- Apply relevant safety regulations and best practices in the lab and in the field.
- Work as part of a survey crew to efficiently complete surveying assignments.
- Create station descriptions using measurements collected with compass and tape.
- Perform a pace-and-compass survey using calibrated pace length, compass, clinometer and hand level.
- Perform a peg test to check the accuracy of an auto level.
- Perform a closed loop differential leveling circuit of acceptable accuracy to determine station elevations.
- Survey a closed traverse using a total station and balance with appropriate software

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Required:

A variety of required readings and documents will be posted, either as external links or as PDF files on the D2L site for the course. You can read these materials online or print them out, but they will be required reading, unless specifically marked as optional. **All lab readings should be done prior to the lab.**

Required Materials – have required materials purchased prior to the START of second week of classes.

Field Book	'Rite-in-Rain': stapled (#351) or spiral bound (#353)
2 mm Lead Holder	Staedtler 780C 2mm lead holder (<i>note the model with the chrome top has a built-in pencil sharpener</i>). Or similar.
2mm 2H leads	2mm 2H leads (in tube). Or similar.
Lead pointer	Staedtler 502 2mm lead pointer (note the Staedtler 780C 2mm lead holder with the chrome top has a built-in pencil sharpener)
White eraser	Staedtler white vinyl eraser. Or similar
Short ruler	6-inch ruler
Calculator	Should have Degrees, Minutes, Seconds (DMS) conversion

Strongly Recommended:

- Rain coat (wind resistance is helpful)
- Wet weather boots
- Warm clothing
- Gloves
- Hat

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.

Lecture:	Tuesday	8:30am – 9:20pm	TEC 181
Lab Section X01A:	Friday	8:30pm – 12:20pm	TEC 257
Lab Section X01B:	Wednesday	8:30pm – 12:20pm	TEC 257
Lab Section X01C:	Thursday	8:30pm – 12:20pm	TEC 257

Week	Week of Monday	ACTIVITY or TOPIC
1	September 4	Lecture: Course Introduction, Introduction to Surveying Lab: Lab Introduction, Compass Use, Pace Calibration, Assignment 1
2	September 11	Lecture: Differential Leveling Lab: Differential Leveling - Peg Test
3	September 18	Lecture: Quiz 1: Differential Leveling Lab: Differential Leveling
4	September 25	Lecture: Direction and Distance Lab: Differential Leveling
5	October 2	Lecture: Angles and Angle Calculations, Assignment 2 Lab: Station Descriptions
6	October 9	Lecture: Traverse Surveying Lab: Reconnaissance Survey
7	October 16	Lecture: Quiz 2: Direction, Distance, Angle Calculations, Angle Conversions Lab: Prism and Total Station Setup Practice
8	October 23	Lecture: Traverse Computations – Angular Lab: Total Station Introduction
9	October 30	Lecture: Traverse Computations – Linear, Assignment 3 Lab: Traverse Survey
10	November 6	Lecture: TBD Lab: Traverse Survey
11	November 13	Lecture: Quiz 3: Traverse Surveying and Computations Lab: Traverse Computations
12	November 20	Lecture: Topographic Surveying Lab: Topographic Survey
13	November 27	Lecture: Review: Field Exam Lab: Practice Field Exam
14	December 4	Lecture: Review: Written Final Exam Lab: Field Exam
15 & 16	Exam	Exam week – Final Exam – Date to be determined

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. https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams](https://camosun.ca/services/academic-supports/accessible-learning/academic-accommodations-exams)

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Assignments (3)	15%
Quizzes (3)	15%
Labs (10)	20%
Practical Field Exam	25%
Written Exam	25%
	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

- An overall weighted average of 50% must be attained on all quizzes and assignments
- A mark of at least 50% must be obtained on both the Practical (Field) Exam and the Written Final Exam, otherwise an F will be awarded.
- All lab work and assignments must be submitted to qualify to write the final exam.
- Late assignments and lab work:
 - Will have 10% deducted if submitted before marked work has been returned to the class or solutions posted.
 - Will receive NO mark if submitted after marked work has been returned to the class or solutions posted, but will be checked and count as submitted.
- Full attendance at the lab sessions is mandatory unless prior approval is granted by the instructor. Students must speak directly to the instructor.
- *5% will be deducted from the final grade for each absence from a lab without the instructor's prior permission or a doctor's certificate. Late arrivals greater than 20 minutes will be considered an absence.*

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
 - information 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 document on the college's website: <https://camosun.ca/sites/default/files/2021-05/g-2.1.pdf>

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 camosun.ca/services.

Support Service	Website
Academic Advising	camosun.ca/services/academic-supports/academic-advising
Accessible Learning	camosun.ca/services/academic-supports/accessible-learning
Counselling	camosun.ca/services/health-and-wellness/counselling-centre
Career Services	camosun.ca/services/co-operative-education-and-career-services
Financial Aid and Awards	camosun.ca/registration-records/financial-aid-awards
Help Centres (Math/English/Science)	camosun.ca/services/academic-supports/help-centres
Indigenous Student Support	camosun.ca/programs-courses/iecc/indigenous-student-services
International Student Support	camosun.ca/international
Learning Skills	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills
Library	camosun.ca/services/library
Office of Student Support	camosun.ca/services/office-student-support
Ombudsperson	camosun.ca/services/ombudsperson
Registration	camosun.ca/registration-records/registration
Technology Support	camosun.ca/services/its
Writing Centre	camosun.ca/services/academic-supports/help-centres/writing-centre-learning-skills

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 Integrity

Students are expected to comply with all College policy regarding academic integrity; which is about honest and ethical behaviour in your education journey. The following guide is designed to help you understand your responsibilities: <https://camosun.libguides.com/academicintegrity/welcome>

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.13.pdf> for Camosun's Academic Integrity policy and details for addressing and resolving matters of academic misconduct.

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:

<https://camosun.ca/services/academic-supports/accessible-learning>

Academic Progress

Please visit <https://camosun.ca/sites/default/files/2023-02/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 <https://camosun.ca/sites/default/files/2021-05/e-2.2.pdf> for further details about course withdrawals. For deadline for fees, course drop dates, and tuition refund, please visit <https://camosun.ca/registration-records/tuition-fees#deadlines>.

Grading Policy

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.5.pdf> for further details about grading.

Grade Review and Appeals

Please visit <https://camosun.ca/sites/default/files/2021-05/e-1.14.pdf> for policy relating to requests for review and appeal of grades.

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 (see [policy](#)). Please visit <https://camosun.ca/services/forms#medical> 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: <https://camosun.ca/sites/default/files/2021-05/e-2.9.pdf> and camosun.ca/services/sexual-violence-support-and-education. To contact the Office of Student Support: oss@camosun.ca or by phone: 250-370-3046 or 250-370-3841

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 <https://camosun.ca/sites/default/files/2021-05/e-2.5.pdf> to understand the College's expectations of academic integrity and student behavioural conduct.

Looking for other policies?

The full suite of College policies and directives can be found here: <https://camosun.ca/about/camosun-college-policies-and-directives>

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.