COURSE SYLLABUS



COURSE TITLE: Engineering Graphics Technician

CLASS SECTION: Commercial Practices 1

TERM: W 2022

COURSE CREDITS: 3.0

DELIVERY METHOD(S): In-Person

Camosun College campuses are located on the traditional territories of the Ləkwəŋən and WSÁNEĆ 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://camosun.ca/about/covid-19-updates

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: Vance Smith

EMAIL: SmithV@camosun.bc.ca

OFFICE: Tech 140

HOURS: Tues 8:30-8:30 Friday 4:30-5:30

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

A detailed examination of residential building construction practices and drawing standards. Material will include: the design and construction process; who does what in the office and on the site; blue print reading; drawing standards and production practices; specification interpretation and preparation. Disciplines covered: Architectural; Civil; Structural; Mechanical; and Electrical.

PREREQUISITE(S): None CO-REQUISITE(S): None EXCLUSION(S): None

COURSE LEARNING OUTCOMES / OBJECTIVES

This course is the first of two related courses. The calendar description and the course objectives presented here are intended to reflect, in part, the objectives of both courses. This course is intended to prepare the technician student to be a useful member of a design team working on the design of buildings and building systems. The student will:

- 1. Become familiar with the overall building construction process
- 2. Gain an appreciation of who does what in the design office and on the construction site
- 3. Review several sets of drawings to become familiar with
 - Details of blueprint reading

- Anatomy of a building and the systems within it
- The drawing styles expected in the building industry
- The symbols used in drawing preparation
- 4. Practice the production of drawings using BIM in an effort to
 - Use Revit as a drafting and design tool
 - Gain speed and accuracy
 - Become familiar with drawing standards and standard drawing production practices
 - Be familiar with the tools available in Revit to become productive members of a project team
- 5. Practice the skill of 'layout' and discuss the rationale behind layout decisions
- 6. Gain experience working as part of a team

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

none

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 or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
1	Lab: Revit and Building Modeling. Building as a system. Revit interface, Levels, Views, Detail components Lecture: How is building construction regulated in BC, Designing Part 9 Buildings, The AEC Team	No Assignment
2	Lab: Setting up a Revit project. Creating floor plans. Customizing annotations. Creating title sheets. Parameters Lecture: Healthy Drafting Overview of how a building is built. Construction documentation: Sheets, plans, sections, details. Reading construction drawings.	Assignment #1: Create a Title sheet, setup a project, setup views, customize text and dimensions
3	Lab: Customizing walls, creating elevations, inserting doors and windows. Lecture: Doors and windows: types, locations, and details. Construction documentation: schedules. TERM PROJECT hand out and discussion.	Assignment #2: Create a floor plan.

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
4	Lab: A visit to a residential construction site. Lecture: Drafting do's and don'ts Roof and floor types, construction.	No assignment this week
5	Lab: Floors and roofs. Customizing Lecture: Regulatory constraints: building codes, zoning and setbacks.	Assignment #3: Add a floor and a complex roof.
6	Lab: Mid-term Exam Creating elevations, building height, unprotected openings Lecture: Review Navigating drawings and finding information. Section information	Assignment #4: Create elevations
7	Reading Break	
8	Lab: Revit workflow: site. Topography, and infrastructure. Lecture: Survey versus site plan: legal implications.	Assignment #4: Create a site context from a survey plan.
9	Lab: Generating sections. Detail components, Detail lines Lecture: It's all in the details Detailing standards, different styles of sections	Assignment #5: Create a section drawing.
10	Lab: Revit workflow: 3D views, lighting & shading Lecture: Project Phases, Submission requirements	Assignment #6: Prepare a cover page and cut-away section
11	Lab: Working with schedules Create a window and door schedule. Lecture: Revit LOD, collaboration, BIM 360, ACC, working with consultants, worksets	Assignment #7: Prepare window and door schedules
12	Lab: TERM PROJECT Lecture: Administrative process: permits and inspections. Documenting bylaw info	
13	Lab: TERM PROJECT Lecture: TERM PROJECT/Bonus discussion	
14	Lab: TERM PROJECT Lecture: Term Review	
15	TERM PROJECT DEADLINE/Final Exam (date TBD)	

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

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Assignments	15
Lab attendance	10

DESCRIPTION		WEIGHTING
Midterm Exam		15
Final Exam		10
Final Project		50
If you have a concern about a grade you have received for an evaluation, please come and see	OTAL	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 <u>Grade Review and Appeals</u> policy for more information. http://camosun.ca/about/policies/education-academic/e-1-programming-and-instruction/e-1.14.pdf

COURSE GUIDELINES & EXPECTATIONS

Lab sessions will consist of practical exercises and assignments with an assignment due one week from the lab date.

Assignments are due the following <u>Tuesday</u> at the beginning of class. Late assignments will have 10% of grade deduction per week.

SCHOOL OR DEPARTMENTAL INFORMATION

[INSERT TEXT HERE]

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

Support Service	Website
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.