COURSE SYLLABUS



COURSE TITLE: CSNT 241 – Cloud Administration

CLASS SECTION: X01

TERM: Winter 2024

COURSE CREDITS: 3

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 <u>Territorial</u>

Acknowledgement.

The COVID-19 pandemic has presented many challenges, and Camosun College is committed to helping you safely complete your education. Following guidelines from the Provincial Health Officer, WorkSafe BC, and the B.C. Government to ensure the health and wellbeing of students and employees, Camosun College is providing you with every possible protection to keep you safe. Our measures include COVID Training for students and employees, health checks, infection control protocols including sanitization of spaces, PPE and ensuring physical distancing. For details on these precautions please follow this link: http://camosun.ca/covid19/faq/covid-faqs-students.html. However, if you're at all uncomfortable being on campus, please share your concerns with your Instructor. If needed, alternatives will be discussed.

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: Phil Vreugdenhil

EMAIL: Vreugdenhilp@camosun.ca

OFFICE: CBA 122A

HOURS: TBD

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 will assess and analyze system requirements to ensure successful cloud deployment. They will also establish appropriate physical and virtual networking required for a cloud deployment. By applying automation tools to maintain, backup, or restore cloud elements, students will configure appropriate security technologies according to service level agreements and system requirements. Students will analyze metrics to determine the allocation of cloud resources, forecast future needs, and troubleshoot deployment, capacity, automation, connectivity, and security issues.

PREREQUISITE(S): CSNT 240 – Cloud Essentials

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

COURSE LEARNING OUTCOMES / OBJECTIVES

Students successfully completing this course will have applied their knowledge of Cloud systems and administration. Upon successful completion of this course a student will be able to:

- > assess and analyse system requirements to ensure successful cloud deployment;
- > establish appropriate physical and virtual networking required for a cloud deployment;
- > apply automation tools to maintain, backup, or restore cloud elements;
- > analyse metrics to determine allocation of cloud resources, forecast future needs, and/or determine the presence of abnormalities;
- > configure appropriate security technologies according to SLA and system requirements; and
- troubleshoot deployment, capacity, automation, connectivity, and security issues.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

- Access to CompTIA Integrated CertMaster Learn & Labs for Cloud+ (CV0-003)
- Access to Camosun College D2L Site
- Journal (binder/notebook) for lab exercises and in-class notes (recommended)

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	Understand Cloud Concepts, Planning a Cloud Environment	
2	Designing a Cloud Environment, Administering Cloud Resources	
3	Administering Cloud Resources, Managing Cloud Storage	
4	Managing Cloud Storage, Managing Networks in the Cloud	
5	Managing, Securing, & Troubleshooting Networks in the Cloud	
6	Managing, Securing, & Troubleshooting Networks in the Cloud	

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
7	No Classes – Reading Week	Reading Week
8	Managing Cloud Migrations, Automation, Orchestration	
9	Understanding Cloud Security Concepts	
10	Manage Cloud Security	
11	Manage Cloud Performance	Good Friday Holiday
12	Maintenance in/of the Cloud	Easter Monday Holiday
13	High Availability & Disaster Recovery in the Cloud	
14	Review, Practical Final Exam	Practical Final Exam
Exam Period	Theory Final Exam	Theory Final Exam

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	
Labs (13x)	26%	
Lab Quizzes (2x)	24%	
Lecture Quizzes (10x)	10%	
Term Tests (2x)		20%
Final Exam – date TBD	20%	
TC	DTAL	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

Attendance is expected for every class. Students who attend, collaborate with classmates, and participate within class discussions achieve more than those that don't.

Attendance is required for the following assessments: Labs, Lab Quizzes, Term Tests, and the Final Exam. Failure to complete the assessment in-person will result in a grade of zero (without prior arrangements).

Lecture Quizzes (10) are on D2L and offer unlimited attempts within a 2-week time period to obtain the max grade. They address recent lecture topics and must be completed in the time allotted. All attempts are available for review later in the semester.

Term Tests (2) are theoretical summative assessments and start at the beginning of the designated lectures. Term Tests are scheduled for an entire lecture period with no extra time provided (without prior arrangements).

Labs (13) are practical assessments using the Lab instructions found on D2L. To demonstrate competency, you must attend every lab period <u>and</u> submit your Lab to D2L by the following Sunday @midnight. Failure to attend the designated lab period <u>or</u> failure to submit your lab to D2L before the deadline will result in a grade of zero. Talk with your instructor about setting up any potential accommodation.

Lab quizzes (2) are summative practical assessments that will take place during 2 designated Lab periods sometime in the middle and at the end of the semester. You will be required to demo the completion of various Cloud-related tasks and answer questions related to Cloud administration. Lab Quizzes are scheduled for an entire lab period with no extra time provided (without prior arrangements).

It is the expectation that students will read all Lessons and answer all Practice questions within the CompTIA Learn Platform to reinforce concepts, not for grades. Expect to spend time reviewing online resources, studying, and practicing what you know outside of "class".

SCHOOL OR DEPARTMENTAL INFORMATION

How are courses evaluated in the Electronics and Computer Engineering department?

In addition to the evaluation scheme addressed above, courses that are a prerequisite must meet the following overriding criteria to pass a course. The reason for these additional criteria is to ensure your success in subsequent courses with a balance of skills in both theory and practice.

The following criteria must be met:

- Students must obtain a minimum weighted average of 60% in theory evaluations (tests, examinations, etc.) in any course that is a pre-requisite for subsequent courses.
- Students must obtain a minimum weighted average of 60% in lab evaluations (lab performance, reports, etc.) in any course that is a pre-requisite for subsequent courses.
- Students must obtain a minimum of 50% on the final examination for a course in order to receive a passing grade.
- Failure to meet any one of these criteria will result in a student receiving a failing grade for the course.
- All assignments (laboratory work, reports, etc.) must be submitted prior to a student writing a final examination. ALL assignments must be submitted in order to qualify to write a final exam.
- Late assignments will have marks deducted; if handed in after assignments are returned to the class, then no mark will be awarded, but the assignment must be submitted.

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/.

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.

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 <u>Centre for Accessible Learning</u> (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.