COURSE SYLLABUS



COURSE TITLE: CSNT-250 DevNet Associates

CLASS SECTION:

TERM: Fall

COURSE CREDITS: 3

DELIVERY METHOD(S): in person

Camosun College campuses are located on the traditional territories of the Lekwəŋən 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: Gurbinder Dhade

EMAIL: dhadeg@camosun.ca

OFFICE: CBA122B

HOURS:

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

The student will be introduced to the methodologies and tools of modern software development as applied to the IT and Network operations. It covers a 360 view of the domain including microservices, testing, containers and DevOps, as well as securely automating infrastructures with Application Programming Interfaces (APIs). Students completing this course, gain practical, relevant, hands-on lab experience, including programming in Python, using GIT and common data formats, deploying applications as containers, using Continuous Integration/Continuous Deployment (CI/CD) pipelines and automating

infrastructure using code. The course prepares students for entry-level software development and infrastructure automation jobs.

PREREQUISITE(S): CSNT 121, CSNT 161

CO-REQUISITE(S): None

EXCLUSION(S):

COURSE LEARNING OUTCOMES / OBJECTIVES

Students successfully completing this course will be able to:

- Become familiar with infrastructure automation as it applies to security,
- Use basic Python programming and Linux skills to improve security,
- Use software development and design best practices related to security,
- Explain the processes and devices that support network connectivity,
- Use current technologies to deploy and secure applications and data in a cloud environment,
- Compare software testing and deployment methods in automation and simulation environments.

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

No printed text required. Access to Netacad

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	Course Introduction	
2	The DevNet Developer Environment	
3	u u u	
4	Software Development and Design	
5	u u u	
6	Understanding and Using APIs	
7	u u u	
8	Network Fundamentals	

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
9	Application Deployment and Security	
10	u u	
11	Infrastructure and Automation	
12	u u	
13	Cisco Platforms and Development	
14	u u u	
15	Final Exam	

- Sep 4 Labor Day College closed (Week 1)
- Oct 2 Truth and Reconciliation Day College closed (Week 5)
- Oct 13 Thanksgiving Day College closed (Week 6)
- Nov 13 Remembrance Day College closed (Week 11)

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 (PKA)	10
Labs	20
Module Exams	20
Final Theory Exam	30
Final Practical Exam	20
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 <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

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:

- Attendance is expected for every class. Students who attend and participate do better than those that don't.
- A student is required to inform the instructor prior to being late or missing a class, or as soon as
 possible.
- 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.
- All Labs must be completed before or by the end of the lab period.
- All Packet Tracers must be completed before or by the due date/time (homework).
- 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.
- No opportunity will be available to write missed module exam.
- 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.
- No late materials (labs/packet tracer) will be accepted past midnight of the last day of the course.
- Failure to meet any one of these criteria will result in a student receiving a failing grade for the course.

SCHOOL OR DEPARTMENTAL INFORMATION

Electronics Dept – Trades and Tech

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.

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.