

COURSE SYLLABUS



COURSE TITLE:	CSNT 161 – Programming Essentials in Python
CLASS SECTION:	X01
TERM:	Winter 2024
COURSE CREDITS:	3
DELIVERY METHOD(S):	Face-to-Face Seminars and Labs, DE via D2L

Camosun College campuses are located on the traditional territories of the Ləkʷəŋən and W̱SÁNEĆ peoples. We acknowledge their welcome and graciousness to the students who seek knowledge here. Learn more about Camosun's [Territorial 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.bc.ca
OFFICE:	CBA 122 A
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

In this introductory programming course, students will learn the basics of scripting in Python, as well as general coding concepts and techniques. Students will practice and experiment with the basic syntax and semantics of programming languages. Students will use the differences between data types and operators (logical and bitwise) to solve problems using an algorithmic approach. Students will write programs using conditional loops, building toward an object-oriented approach with knowledge of how a program is executed in a computer environment.

PREREQUISITE(S):	IoT Connect & Secure
CO-REQUISITE(S):	CCNA 2, Security, Server
EXCLUSION(S):	none

COURSE LEARNING OUTCOMES / OBJECTIVES

Students successfully completing this course will have gained basic Python scripting skills with a focus on networking, cybersecurity, and IT concepts. They will be able to:

- Explain basic programming concepts such as compiler, interpreter, IDE, data type, operator, etc
- Distinguish Python from other scripting languages along with its advantages and limitations
- Write Python scripts to:
 - Perform basic IT services
 - Monitor networks and administer necessary changes
 - Identify and fix security vulnerabilities

REQUIRED MATERIALS & RECOMMENDED PREPARATION / INFORMATION

Students will require the following:

- Access to Python for IT course home page through Camosun College D2L
- Access to Python Essentials course through Cisco Netacad LMS
- Notebook to record notes and observations

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
Week #1	Intro Python, IDEs, Comparison to other languages	
Week #2	Data Types, Variables, Operators, Operations	Quiz #1
Week #3	Booleans, Conditions, Loops	Quiz #2
Week #4	Lists & List Processing (& Strings intro)	Quiz #3
Week #5	Dictionaries	Quiz #4
Week #6	Functions	Quiz #5
Week #7	Reading Week – No Classes	Finish Python Essentials I
Week #8	Review, Term Test #1, Modules	
Week #9	Modules, Packages & PIP	Quiz #6

WEEK or DATE RANGE	ACTIVITY or TOPIC	OTHER NOTES
Week #10	Strings vs Lists, Methods, Exceptions	Quiz #7
Week #11	Finish SLME, Start Object-Oriented Programming	Quiz #8
Week #12	OOP continued	Quiz #9
Week #13	File Systems, OS/Time Library modules	Quiz #10
Week #14	Review, Term Test #2	Finish Python Essentials II
End of Semester	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 notice is required. Deadlines can be reviewed on the [CAL exams page](http://camosun.ca/services/accessible-learning/exams.html). <http://camosun.ca/services/accessible-learning/exams.html>

EVALUATION OF LEARNING

DESCRIPTION	WEIGHTING
Labs (10x)	40%
Labs Quizzes (2x)	20%
Quizzes (10x)	10%
Term Tests (2x)	20%
Final Exam – date TBD	10%
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

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 all assessments: Labs, Quizzes, Term Tests, and the Final Exam.

Quizzes, and Term Tests start at the beginning of the Friday lectures with no extra time to account for lateness. Quizzes are ~15 minutes long and focus on recent topics. Term Tests are summative and scheduled for an entire Lecture period.

Lab documents are due to D2L by Sunday @midnight. Labs submitted to D2L after the deadline receive a grade of zero. Labs must also be demoed to the instructor by the beginning of the following lab period (ie: must demo Lab #4 – List & List Methods by the beginning of Lab #5 period. Demo-ing later, (ie: in the middle of Lab #5 period or after) results in a grade of zero.

It is the expectation that students will complete all chapter Quizzes and Exams on Netacad to reinforce concepts, not for grades. Expect to spend time reviewing online resources, studying, and practicing what you know outside of “class”.

The Quizzes, Labs, and Term Tests are all in-class, F2F assessments.

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 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 assigned work (labs, quizzes) must be submitted prior to a student writing a final examination.**
- **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.

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](http://camosun.ca/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.