

Unit 00: Course Overview

Anthony Estey

CSC 115: Fundamentals of Programming II

University of Victoria

Who am I?

- ▶ Anthony Estey

- ▶ From a small town, Sechelt, here in BC, Canada
- ▶ I completed my Ph.D at the University of Victoria in 2016
- ▶ Was an instructor at UBC from September 2016 - August 2019

- ▶ Since returning to UVic, I have taught

- ▶ CSC 110 (both sections) during Fall 2019,
- ▶ CSC 106 and 130 during Spring 2020
- ▶ CSC 115 and 225 during Summer 2020
- ▶ CSC 106 and 115 during Fall 2020

Who are you?

- ▶ I assume mostly students who took CSC 110 or 111 at UVic...

Before we get started

- ▶ A few **administration** notes:

- ▶ We are still trying to add more labs

- ▶ If you are registered in the course:

- ▶ there will be a lab spot for you before labs start next week

- ▶ I am unable to manually add/remove/swap lab registration, only department advisors can do that: <https://www.uvic.ca/engineering/computerscience/undergraduate/advising-services/index.php>

- ▶ If you are on the waitlist:

- ▶ we are working to get you into the course

- ▶ it looks like ~50 students on the waitlist should get into the course, but there are still no guarantees that everyone will get a spot

Plagiarism

- ▶ Submitted work may be checked using plagiarism detection software
- ▶ An Academic Integrity Committee (AIC) has been formed to handle student plagiarism within the computer science department
- ▶ Cheating, plagiarism and other forms of academic fraud are taken very seriously by both the University and the Department.
- ▶ For the UVic policy on academic integrity, you should consult:
 - ▶ <https://web.uvic.ca/calendar2019-01/undergrad/info/regulations/academic-integrity.html>
 - ▶ Note that the university policy includes the statement that:
 - ▶ **"A largely or fully plagiarized assignment should result in a grade of F for the course"**

Copyright

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Course Goals

- ▶ introduce two fundamental programming concepts:
 - ▶ abstract data types
 - ▶ recursion
- ▶ examine and apply these concepts within the context of an object-oriented approach to programming
- ▶ introduce techniques for reasoning about the efficiency of algorithms and data structures

Course Format

► Grade breakdown:

Component	Weight
Lecture Quizzes	10%
Labs	10%
Assignments	30%
Exams	50%
TOTAL	100%

Course Format

▶ Pre-Lecture Videos

- ▶ before each lecture, there will be videos introducing each concept
- ▶ these will contain slides, visualizations, and code examples
- ▶ ASSUMPTION: You will watch these videos BEFORE the lecture

▶ Review Quiz: (10%)

- ▶ there will be a short quiz to be completed before lecture ensuring you understand the concepts introduced in the videos

▶ Lectures:

- ▶ work through activities introduced in the pre-lecture videos
- ▶ IDEA: videos introduce the concepts; lecture time is spent exploring the concepts at a deeper level (and working through more challenging problems)

Course Format (cont'd)

▶ Labs (10%)

- ▶ Start NEXT week
- ▶ 10 labs, two hours each, held online (Zoom)
- ▶ Provide an environment for you to work through exercises on topics introduced in the previous week.
- ▶ There will be TAs in the Zoom meeting that can assist you as you progress through each of the exercises
- ▶ You will submit your code at the end of the scheduled lab time

Course Format (cont'd)

▶ Assignments

- ▶ All assignments will be completed individually
- ▶ All assignments will be submitted through ConneX
- ▶ 1 introductory assignment (Assignment 1) worth 1% to familiarize you with the submission system and to ensure you submit a file according to the specifications
- ▶ 7 main assignments (Assignments 2 - 7) that cover each of the main topics covered in the lectures

Course Format (cont'd)

▶ Exams

- ▶ Three exams, which make up 50% of your total grade
- ▶ They will all be online
- ▶ Specific details still unknown (format, length, etc)

▶ Dates:

- ▶ February 1st, at 6:30pm (Victoria, BC time) (15%)
- ▶ March 11th, at 6:30pm (Victoria, BC time) (20%)
- ▶ April 12th, at 6:30pm (Victoria, BC time) (15%)

Resources

- ▶ ConneX site: <https://connex.csc.uvic.ca>
 - ▶ All course material will be posted on our ConneX site
 - ▶ pre-lecture video links, quizzes, slides, assignments, announcements, etc
 - ▶ You should all be automatically added to our ConneX site
- ▶ Textbook (not required):
 - ▶ Data Abstraction and Problem Solving with Java: Walls and Mirrors (3rd Ed.)
by Frank M. Carrano and Janet J. Prichard, Addison-Wesley, 2005.
 - ▶ Lecture videos and slide will provide the learning material, but the textbook is a great resource for further reading on these topics

Homework

- ▶ What you are expected to do before next lecture:
 - ▶ Install Java version 15 on your home device
 - ▶ link: <https://www.oracle.com/java/technologies/javase-jdk15-downloads.html>
 - ▶ Write, compile, and execute a simple Java program on your home device
 - ▶ Watch the pre-lecture videos
 - ▶ Complete the pre-lecture quiz
- ▶ There are videos posted to the ConneX page to help you with everything mentioned above

Running a Java Program

- ▶ In this course we will compile and execute our Java programs using a command-line interface:
 - ▶ Command prompt (cmd) in Windows
 - ▶ Terminal in Mac OSX
- ▶ You can use any editor you wish, here are some recommendations:
 - ▶ Notepad++ (Windows)
 - ▶ Sublime (Windows/Mac)
 - ▶ Atom (Windows/Mac)