CMPT 118 - E100 Spec.Top./Computer & Info.Tech

Instructor(s): Diana Cukierman

SFU Burnaby

Calendar Objective/Description:
Spec.Top./Computer & Info.Tech

Instructor's Objectives:

In this course we will explore fundamental ideas of Computing Science; you will create simple programs using graphical and user-friendly programming languages; and explore applications of Computing Science in diverse fields, such as AI and Robotics. We will also discuss the far-reaching impact of Computing Science on modern society, our disciplines, and all of us.

The topics that we will address will include those described in this outline, subject to modifications and time availability. We will alternate between lessons, talks by invited speakers, and doing a diverse style of assignments, including both individual and group activities, during and outside of lectures. It is assumed that students have no programming background.

For this Fall 2020 semester, all course components (lectures, assignments, and exams) will be in an online format. You must have access to a computer with internet access, allowing the use of a conferencing system such as Zoom or BB Collaborate Ultra. Some components of the course will require synchronous (real-time) participation during the scheduled lecture and/or exam times. Visual proctoring may be required, subject to university approval.

There is no required textbook. Assigned readings will be selected from materials available online or will be provided. This is not a W (Writing intensive) course, however students will be expected to do some writing assignments.

All the course information and communication will be centralized in the Canvas course website, including materials, assignments, and a discussion forum. You should organize your Canvas settings to be notified when announcements are posted.

Students who are currently enrolled in a CMPT course at the 200 division or higher, or have credit or are currently enrolled in CMPT 120, 130, 125, 127, 135 or 170, or IAT 265 or 267 may not take this Fall 2020 CMPT 118 offering for further credit.

Prerequisites:

see go.sfu.ca

Topics:

- Problem solving and Computational thinking.
- Exploring programming (in Snap! and/or Python)
- Introduction to Artificial Intelligence and some Applications
- Introduction to Robotics and Chatbots
- Behind the scenes. Data representation.
- Impact of Computing on Society.

Grading:

There will be assignments, discussions, projects and multiple quizzes/exams. A more detailed marking scheme will be provided in the first class of the semester.
Students must attain an overall passing grade on the weighted average of exams in the course in order to obtain a clear pass (C- or better).

Reference Books:

Computer Science Illuminated, 7th edition, Nell Dale, John Lewis, Jones & Bartlett, 2020, 9781284155617, The 6th edition full text is available online via the SFU Library,

Academic Honesty Statement::

Academic honesty plays a key role in our efforts to maintain a high standard of academic excellence and integrity. Students are advised that ALL acts of intellectual dishonesty will be handled in accordance with the SFU Academic Honesty and Student Conduct Policies (http://www.sfu.ca/policies/gazette/student.html).