THE UNIVERSITY OF BRITISH COLUMBIA

Land Acknowledgement

We respectfully acknowledge the Syilx Okanagan Nation and their peoples, in whose traditional, ancestral, unceded territory UBC Okanagan is situated.

COSC 123: Computer Creativity

Faculty: Irving K. Barber Faculty of Science

Department: Computer Science, Mathematics, Physics, and Statistics

Instructor(s): Dr. Firas Moosvi

Instructor(s) Email: firas.moosvi@ubc.ca

Duration: Term 2 Winter 2022 Delivery Modality: In-Person Course Location: EME 0050 Course Days: Mon/Wed/Fri Class Hours: 10:00 - 11:00

Office hours: My student hours are from Monday 11 AM - 12 PM in EME 0050 and Fridays 1 PM - 2 PM via Zoom.

Course Description

COSC 123 (3) Computer Creativity

A hands-on introduction to programming and computer-based problem solving and creativity. Experience with application development including storytelling, graphics, games, and networking. [3-2-0]

Prerequisite: One of COSC 111, COSC 122...

Corequisite: N/A.

Course Format

In-Person

Course Overview, Content and Objectives

You should take this course to see how art and coding can come together to produce wondrous creations. Our ultimate goal is to give you a more fun introduction to programming by allowing you to express your creativity. You will learn programming basics such as decisions, iteration, objects, methods, and classes through the Processing language. You will also explore events, graphics, animation, 2D gaming, and file manipulation while practising programming concepts. By completing this course, I hope you will understand programming fundamentals, have created interesting and fun programs and animations, and have the ability to continue in following computer science courses. I hope by taking this course your creative juices start flowing and you can see the role that coding can play in the Arts.

Learning Outcomes

Upon successful completion of this course, students will be able to...

The learning intentions for this course are to:

- To be creative with programming and write fun, interesting computer programs.
- To attain proficiency in fundamental programming skills of data variables, decisions, iteration, methods, and the basics of object-oriented programming, and how to create larger programs
- To design and develop strategies for solving basic programming problems.
- To algorithmically create 2D graphics, animations, and simple games using Processing language.
- To design interactive graphical user interfaces.
- To learn to solve problems cooperatively as a team (of two).
- To learn how to switch from Processing to Java.

Assessments of Learning

Learning Logs - 10% Labs - 50% Tests - 20% Final Exam - 20%

The use of artificial intelligence (AI) assistance - including tools such as ChatGPT - for any assessed portions of this course is not permitted.

Course schedule

See course website for details of the schedule of topics

Late policy

- 48 hour grace-period on all due dates and deadlines except Tests.
- Classes are recorded, but not live streamed. Recordings are available 24-48 hours after the class.

Missed exam policy

- For each of the tests, there will be a bonus test one week later and the better score of the Test-Bonus Test pair will be taken.

Missed Activity Policy:

- Best 10 of 11 labs and learning logs will be considered for the final grade

Passing/Grading Criteria

- All students must satisfy ALL conditions to pass the course:
- 1. Obtain an average grade of at least 50% on the Labs,
- 2. Obtain an average grade of at least 50% on the Test and Exam components together,
- 4. Obtain an average grade of at least 40% on the Final Exam,
- 5. Obtain a grade of at least 50% on the whole course.

Learning Materials

Course materials will be provided on the course website: https://firas.moosvi.com/courses/cosc123/2022_WT2.

Other Course Policies

Academic Integrity

The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating usually result in a failing grade or mark of zero on the assignment or in the course. Careful records are kept to monitor and prevent recidivism.

A more detailed description of academic integrity, including the University's policies and procedures, may be found in the Academic Calendar at: http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,54,111,0

Final Examinations

You can find the Senate-approved term and examination dates here. Except in the case of examination clashes and hardships (three or more formal examinations scheduled within a 27-hour period) or unforeseen events, students will be permitted to apply for out-of-time final examinations only if they are representing the University, the province, or the country in a competition or performance; serving in the Canadian military; observing a religious rite; working to support themselves or their family; or caring for a family member. Unforeseen events include (but may not be limited to) the following: ill health or other personal challenges that arise during a term and changes in the requirements of an ongoing job.

Further information on Academic Concession can be found under Policies and Regulation in the Okanagan Academic Calendar http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,48,0,0

Grading Practices

Faculties, departments, and schools reserve the right to scale grades in order to maintain equity among sections and conformity to University, faculty, department, or school norms. Students should therefore note that an unofficial grade given by an instructor might be changed by the faculty, department, or school. Grades are not official until they appear on a student's academic record.

http://www.calendar.ubc.ca/okanagan/index.cfm?tree=3,41,90,1014

Resources to Support Student Success:

UBC Okanagan Disability Resource Centre

The DRC facilitates disability-related accommodations and programming initiatives to remove barriers for students with disabilities and ongoing medical conditions. If you require academic accommodations to achieve the objectives of a course please contact the DRC at:

UNC 215 250.807.8053 Email: drc.questions@ubc.ca Web: www.students.ok.ubc.ca/drc

UBC Okanagan Equity and Inclusion Office

Through leadership, vision, and collaborative action, the Equity & Defice (EIO) develops action strategies in support of efforts to embed equity and inclusion in the daily operations across the campus. The EIO provides education and training from cultivating respectful, inclusive spaces and communities to understanding unconscious/implicit bias and its operation within in campus environments. UBC Policy 3 prohibits discrimination and harassment on the basis of BC's Human Rights Code. If you require assistance related to an issue of equity, educational programs, discrimination or harassment please contact the EIO.

UNC 325H 250.807.9291 Email: equity.ubco@ubc.ca Web: www.equity.ok.ubc.ca

Student Wellness

At UBC Okanagan health services to students are provided by Student Wellness. Nurses, physicians and counsellors provide health care and counselling related to physical health, emotional/mental health and sexual/reproductive health concerns. As well, health promotion, education and research activities are provided to the campus community. If you require assistance with your health, please contact Student Wellness for more information or to book an appointment.

UNC 337 250.807.9270

Email: healthwellness.okanagan@ubc.ca
Web: www.students.ok.ubc.ca/health-wellness

Office of the Ombudperson

The Office of the Ombudsperson for Students is an independent, confidential and impartial resource to ensure students are treated fairly. The Ombuds Office helps students navigate campus-related fairness concerns. They work with UBC community members individually and at the systemic level to ensure students are treated fairly and can learn, work and live in a fair, equitable and respectful environment. Ombuds helps students gain clarity on UBC policies and procedures, explore options, identify next steps, recommend resources, plan strategies and receive objective feedback to promote constructive problem solving. If you require assistance, please feel free to reach out for more information or to arrange an appointment.

UNC 328 250.807.9818

Email: ombuds.office.ok@ubc.ca
Web: www.ombudsoffice.ubc.ca

Student Learning Hub

The Student Learning Hub is your go-to resource for free math, science, writing, and language learning support. The Hub welcomes undergraduate students from all disciplines and year levels to access a range of supports that include **tutoring in math, sciences, languages, and writing, as well as help with study skills and learning strategies**. Students are encouraged to visit often and early to build the skills, strategies and behaviors that are essential to being a

confident and independent learner. For more information, please visit the Hub's website.

LIB 237 250.807.8491

Email: learning.hub@ubc.ca
Web: www.students.ok.ubc.ca/slh

The Global Engagement Office

The Global Engagement Office provides advising and resources to assist International students in navigating immigration, health insurance, and settlement matters, as well as opportunities for intercultural learning, and resources for Go Global experiences available to all UBC Okanagan students, and more.

Come and see us – we are here to help! You may also contact geo.ubco@ubc.ca

Safewalk

Don't want to walk alone at night? Not too sure how to get somewhere on campus? Call Safewalk at **250-807-8076**. For more information, see: www.security.ok.ubc.ca

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Department of Computer Science, Mathematics, Physics and Statistics

Other Important Information

Cooperation vs. Cheating

Working with others on assignments is a good way to learn the material and we encourage it. However, there are limits to the degree of cooperation that we will permit. Any level of cooperation beyond what is permitted is considered cheating.

When working on programming assignments, you must work only with others whose understanding of the material is approximately equal to yours. In this situation, working together to find a good approach for solving a programming problem is cooperation; listening while someone dictates a solution is cheating. You must limit collaboration to a high-level discussion of solution strategies, and stop short of actually writing down a group answer. Anything that you hand in, whether it is a written problem or a computer program, must be written by you, from scratch, in your own words. If you base your solution on any other written solution, you are cheating. If you provide your solution for others to use, you are also cheating.

Grievances and Complaints Procedures

A student who has a complaint related to this course should follow the procedures summarized below:

- The student should attempt to resolve the matter with the instructor first. Students may talk first to someone other than the instructor if they do not feel, for whatever reason, that they can directly approach the instructor.
 - If the complaint is not resolved to the student's satisfaction, the student should e-mail the Associate Head for Computer Science, Dr. Yves Lucet at yves.lucet@ubc.ca or the Department Head, Dr. W. John Braun at cmps.depthead@ubc.ca .

Student Services Resources

Sexual Violence Prevention and Response Office (SVPRO)

A safe and confidential place for UBC students, staff and faculty who have experienced sexual violence regardless of when or where it took place. Just want to talk? We are here to listen and help you explore your options. We can help you find a safe place to stay, explain your reporting options (UBC or police), accompany you to the hospital, or support you with academic accommodations. You have the right to choose what happens next. We support your decision, whatever you decide.

Visit svpro.ok.ubc.ca or call us at 250-807-9640