Brock University - COSC 2P95 - Programming in C++ with Applications - Fall 2019-20

Instructor: Earl Foxwell
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Classes: Tuesdays 7:00pm–9:00pm, WH324

This course covers both procedural and object-oriented approaches to solving tasks, using C/C++ within a Unix-like environment. Additional topics include ADTs, templates, and libraries; data structures and algorithms; make; and Bash and gnuplot. Material will be introduced both in lectures, as well as in practical labs.

Course Materials:

Textbook: The C++ Programming Language 4th Edition – Stroustrup

Additional Reading: Effective C++ Third Edition – Meyers

Lecture slides and additional materials will also be distributed via the web presences.

Evaluation:

Labs:	10×1=**10%**
Lab Exercises:	10×5=**50%**
Exam:	1×40=**40%**

Note: You are only eligible to receive credit for lab exercises corresponding to labs that you have attended (unless your instructor or lab demonstrator approves otherwise).
Additionally, a final grade of at least 40% is required for the final exam in order to receive credit for the course.

Additional Notes:

- If contacting your instructor via email, please include "COSC 2P95" in the subject line.
- All official correspondence for this course will be sent to your Brock email address. Please check this account regularly.
- Please read the department's policy on medical notes on the COSC home page. Other reasons may be used for granting extensions or other accommodations, at the instructor's discretion, but only if the instructor is contacted *in advance* of due dates.
- Plagiarism is a serious offense and will be treated accordingly. Phrase-matching software, such as MOSS, will be applied to compare submissions. For more information, please see http://www.cosc.brocku.ca/about/policies/plagiarism for details.
    - Note that distribution of university material (e.g. online) may constitute both academic *and* non-academic misconduct
- As part of Brock University's commitment to a respectful work and learning environment, the university will make every reasonable effort to accommodate all members of the university community with disabilities. If you require academic accommodations related to a permanent disability to participate in this course, you are encouraged to contact the Student Development Centre Services for Students with Disabilities (4th Floor Schmon Tower ext. 3240) and also to discuss these accommodations with the instructor.
- November 5th is the last day for voluntary withdrawal without academic penalty. At least 15% of your final grade will be available by November 1st.

Lab Schedule

Note that the following schedule is highly tentative at the moment, and subject to change.

Lab Schedule	
Week 1: Sep 4–6	(No labs)
Week 2: Sep 9–13	
Week 3: Sep 16–20	Introduction
Week 4: Sep 23–27	Compiling and Basics
Week 5: Sep 30–Oct 4	Functions, command-line parameters
Week 6: Oct 7–11	Files and I/O
Oct 14–18 — Fall Break Week	
Week 7: Oct 21–25	Pointers, references, allocation, and data structures
Week 8: Oct 28–Nov 1	Make, Object Orientation, and libraries
Week 9: Nov 4–8	Templates and ADTs
Week 10: Nov 11–15	Graphs
Week 11: Nov 18–22	Threading
Week 12: Nov 25–29	Gnuplot

Note that weeks are labelled as being Monday–Friday, rather than the official Wednesday–Tuesday.