Brock University - COSC 2P95 - Programming in C++ with Applications - Fall 2016-17

Instructor: Earl Foxwell
Classes: Fridays, 15:00-17:00 (TH245)

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:
Section 01 (MATH):
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).

Section 02 (COSC):
Labs: 10×1=**10%**
Assignments: 3×18=**54%**
Exam: 1×36=**36%**

Note: A final grade of at least 40% is required for the final exam in order to receive credit for the course. This applies to both sections.

Additional Notes:
- If contacting your instructor via email, please include "COSC 2P95" as well as your section (01/MATH or 02/COSC) 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.
- 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 8th is the last day for voluntary withdrawal without academic penalty. At least 15% of your final grade will be available by November 4th.

Lab Schedule

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

Lab Schedule	
Week 1: Sep 9	(No labs)
Week 2: Sep 12–16	Introduction
Week 3: Sep 19–23	Compiling and Basics
Week 4: Sep 26–30	Functions, command-line parameters
Week 5: Oct 3–7	Files and I/O
Oct 10–14 — Fall Break Week	
Week 6: Oct 17–21	Pointers, references, allocation, and data structures
Week 7: Oct 24–28	Make, Object Orientation, and libraries
Week 8: Oct 31–Nov 4	Templates and ADTs
Week 9: Nov 7–11	Graphs
Week 10: Nov 14–18	Threading
Week 11: Nov 21–25	Gnuplot/Bash
Week 12: Nov 28–Dec 2	(No labs)

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