## Memorial University of Newfoundland and Labrador

# **Engineering 1020** Introduction to Programming

# COURSE OUTLINE

Fall 2012

MUN-D2L (http://online.mun.ca/)

http://www.engr.mun.ca/~lihong/teaching/EN1020/index.htm

Instructors: Dr. Lihong Zhang (Lecture), <a href="mailto:lzhang@mun.ca">lzhang@mun.ca</a>, EN-3031

Mr. Stephen Foote (Lab), sfoote@mun.ca, EN-3020

**Office Hours:** L. Zhang, Friday 11:00-12:00, 16:00 - 17:00

TDB

**Lectures:** Mon. Wed. and Fri. 09:00 - 09:50 in EN-1054

**Course Website:** MUN-D2L (http://online.mun.ca/)

Labs/Tutorials: Division 1: Tuesday 9:00 - 10:50 in EN-3000/29

Division 2: Tuesday 11:00 - 12:50 in EN-3000/29

Course Textbook: Frank L. Friedman and Elliot B. Koffman, Problem Solving, Abstraction

and Design Using C++ (5th Edition), Addison Wesley, 2006, ISBN: 0-321-45005-1. (Note: The textbook is not mandatory. It is specified only as a backup. The lecture notes are the primary resource and are

available on the web in a form that may readily be printed.)

**Contents:** The topics will cover, but not be limited to: Introduction to computers,

problem solving with software programming, overview of C/C++ programming language, problem solving following a top-down design approach using functions, selection structures and repetition structures in C++, modular programming, stream and file operation, structured

data types, number systems, and digital logic.

**Evaluation:** Assignments (best 7 out of 8): 12 %

Mid-term: 30 % Final exam: 58 %

Note: (1) There will be a practice Assignment 0 to test the WebSubmit

system.

(2) The last assignment may be due during the last two weeks of the

term.

Important Dates (Tentative):

Assignments due date: Weekly on Friday mornings (8:55 am) starting

Sept. 21.

Mid-term Exam: Oct. 16 (Tuesday evening)

Final Exam: TDB

#### **Teaching Assistants:**

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## **Calculator Policy:**

Only simple scientific calculators are permitted in all quizzes, tests and examinations. Programmable calculators with text storage and graphics capabilities, as well as other aids (books, notes, formula sheets, electronic translators and devices, etc.) are NOT allowed. Unauthorized use of the above aids or devices during quizzes, tests and examinations will be considered as an academic offence.

Students are expected to maintain academic integrity in the course and in the engineering program. Cheating on quizzes, tests, and examinations will be dealt with in accordance with the procedures outlined under Academic Misconduct (see the 2012-2013 University Calendar). Calculators are not needed or suggested for this course.

#### Other Notes:

- 1. Students are expected to do their own assignments. Group work is not permitted.
- 2. Any concerns about marking or special circumstances must be brought to the instructors' attention before the final exam. After the final exam has been written, only that mark might be re-considered.
- 3. Academic dishonesty will not be tolerated. The work in question will receive a grade of zero, and a formal process might be started. Be very careful of falling prey to plagiarism.

#### Reference books:

- 1. Brian Overland, C++ Without Fear: A Beginner's Guide That Makes You Feel Smart, Prentice Hall PTR, 2004 (ISBN: 0321246950)
- 2. Deitel Choffnes and Deitel Kelsey, Simply C++: An Application-Driven Tutorial Approach, Prentice Hall, New Jersey, 2005
- 3. B. Stroustrup, *The C++ Programming Language (Third Edition)*, Addison-Wesley, 1997.
- 4. Ivor Horton, Beginning C++, The Complete Language ANSI/ISO Compliant, Wrox Press Ltd., 1998