Boston University

MET CS 201: Introduction to Programming

Fall 2012

Instructor Information

Instructor: Robert Montminy E-mail: montminy@bu.edu

Office Hours: 5:30 - 6:00 p.m. on Class Evenings (Earlier by Appointment)

Course Description

This is a first course of a possible three course sequence in programming for the student with little or no programming experience. The course introduces students to problem-solving methods, algorithm development, and implementing program code in C++. Topics covered will include procedural and data abstractions, program design, debugging, testing, and documentation. The course will also include both built-in and programmer defined data types, control structures, library functions, programmer defined functions with parameter passing, arrays, structures, as well as an introduction to object oriented programming using classes. Laboratory exercise will be implemented using the C++ programming language.

Assignments

During the semester students will be required to write, debug, and execute approximately ten C++ programs. All programming assignments are expected to compile successfully, contain meaningful identifiers and comments, be well structured, and generate correct results. Programming assignments must be turned in on time. There will be a penalty of 10% per class day for late programs. No programming assignments will be accepted after the close of the last scheduled class. All outstanding programs, quizzes, or exams at that time will receive a failing grade of zero.

Grading

Course grading will be based on the following criteria:

Programming assignments 40%
Quizzes 30%
Final Exam 30%

Textbook, Compilers and Useful URLs

Textbook:

Starting Out with C++ from Control Structures through Objects (Brief Version)

7th (or 6th) Edition, Gaddis, Tony, Barret Kupnow, Boston, MA: Addison-Wesley.

Free Compilers:

PC: Microsoft Visual C++ Express Edition (2008 or 2010 edition) or DevC++

MAC: Xcode or Eclipse or NetBeans

URLs:

http://blackboard.bu.edu/webapps/portal/

** Above link requires an active BU Login ID and Kerberos password

http://www.aw-bc.com/info/gaddisbooks/

http://www.bloodshed.net/ (Free compilers)

http://www.coursesmart.com/IR/1634837/9780132773072

**Above link to Coursesmart for 180 day rental of Gaddis text

Class Handouts

Students will be responsible for downloading individual class handouts from the Blackboard 8 website (http://blackboard.bu.edu/webapps/portal/) prior to each class. A valid BU Login ID and Kerberos password will be necessary to access this site. Copies will not be available from the instructor after the first class session. Online handouts will be available to students two days prior to class and homework assignments will be posted on the evening of class.

Academic Honesty

The course is governed by the Academic Conduct Committee policies regarding plagiarism (any attempt to represent the work of another person as one's own). This includes copying (even with modifications) of a program or a segment of code without attribution. You can discuss general ideas with other people, but the work you submit must be your own. Collaboration is not permitted unless you are otherwise instructed.

Schedule

Schedule		
DATE	TOPICS	CHAPTERS
9/10	Introduction to Computers and C++ Programming	1/2
9/17	C++ Programming & Expressions	2/3
9/24	Interactivity & External I/O Files	3/5
10/1	Making Decisions	4
10/9(Tuesday)	Making Decisions & Looping	4/5
10/15	Looping & Functions	5/6
10/22	Functions and Arrays	6/7
10/29	Arrays	7
11/5	2-D Arrays, Search & Sort,	7/8
11/12	Pointers	9
11/19	"Catch-Up" class	
11/26	Structured Data	11
12/3	Introduction to Classes	13
12/10	Classes and Final Exam Review	13
12/17	*** Final Exam ***	