## **Boston University**

# **MET CS 201: Introduction to Programming**

# Spring 2015

#### **Instructor Information**

Instructor: Robert Montminy E-mail: <u>montminy@bu.edu</u> 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, and structures. Time permitting, an introduction to object oriented programming using classes will be included. 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)

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

Free Compilers:

PC: Microsoft Visual C++ Express Edition or DevC++

MAC: Xcode or Eclipse or NetBeans

URLs:

http://learn.bu.edu/ (Blackboard Learn) \*\* 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 Learn website (<u>http://learn.bu.edu/</u>) 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			
DATE	TOPICS	CHAPTERS	
1/26	Introduction to Computers and C++ Programming	1/2	
2/2	C++ Programming & Expressions	2/3	
2/9	Interactivity & External I/O Files	3/12	
2/17(Tuesday)	Making Decisions	4	
2/23	Making Decisions & Looping	4/5	
3/2	Looping & Functions	5/6	
3/9	***Spring Recess No Class ***		
3/16	Functions	6/7	
3/23	Arrays & Midterm Review	7	
3/30	Search & Sort, 2-D Arrays	7/8	
4/6	Pointers	9	
4/13	Structured Data	9/10/11	
4/22(Wednesday)"Catch-up" class			
4/27	Introduction to Classes & Final Exam Review	13	
5/8(Friday)	*** Final Exam ***		

For additional information please visit http://csmet.bu.edu Computer Science Department at Boston University Metropolitan College