

# Programming with C++

## Boston University

**MET CS231S-B1**

Summer II, 2017

Days: Tuesdays and Thursdays, 6:00-9:30 PM

Location: Charles River Campus, Boston

Instructor: Mike Hadavi

E-mail: hadavi@bu.edu

Office Hours: After class

Website: <http://onlinecampus.bu.edu>

### COURSE DESCRIPTION

Covers the elements of object-oriented programming and the C++ language. Data types, control structures, functions, library functions, classes, inheritance, and multiple inheritance. Use of constructors, destructors, function and operator overloading, reference parameters and default values, friend functions, input and output streams, templates, and exceptions. Laboratory course.

### PREREQUISITE

MET CS 201; or instructor's consent

### TEXTS

Required: C++ HOW TO PROGRAM, 10th Edition, by Deitel and Deitel, published by PEARSON, 2017, with ISBN-13: 978-0134448237 (ISBN-10: 0134448235)

Optional: Introduction to Programming in C++, by Maslanka, published by Kendall Hunt, 2009, ISBN: 978-0-7575-6536-6

### GRADING

Programming assignments	45%
Homework assignments	05%
Exam	50%

### PROGRAM EVALUATION CRITERIA

Program correctness	50%
Documentation	20%
Readability	20%
Etc.	10%

*"To write a good program takes intelligence, taste, and patience. You are not going to get it right the first time; experiment!"*

**Bjarne Stroustrup, The C++ Programming Language, 2nd edition**

*continued...*

**SCHEDULE (very tentative)**

<b>DATE</b>	<b>TOPIC</b>	<b>READING (TEXT CHAPTER)</b>
07/06	Introduction	1, 2, App. D
07/07	<b>(Friday)</b> Classes, Objects, Strings	3
<b>07/11</b>	Control Statements	4, 5
07/13	Functions, Preprocessor	6, App. E
<b>07/18</b>	Templates	7, 18
07/20	Pointers	8
<b>07/25</b>	Exceptions	9, 17
07/27	Operator Overloading, Inheritance	10, 11
<b>08/01</b>	Polymorphism	12
08/03	Stream I/O, File Processing, String	13, 14, 21
<b>08/08</b>	Review	
08/10	Exam	

*Note: Bold dates are Tuesdays.*

**IMPORTANT NOTES**

- Reading the relevant material in the textbook is essential for gaining a thorough understanding of the topics covered in the course.
- Not all of the material in each chapter will be covered during lecture/discussion, but the material should be read in any case.
- Depending on the progress of the course, some topics may be covered earlier or later.
- Your programs must be done in C++. One point will be deducted from the grade for each week a programming assignment is late after a one-week grace period.
- See a copy of "Summer 2017 Course Schedule" (or view the info online). It contains lots of useful data such as radio stations announcing class cancellations, important dates, etc.

**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. You can discuss general ideas with other people, but the work you submit must be your own. Collaboration is not permitted.

**ELECTRONIC MAIL**

To be sure you *can* communicate with the instructor electronically and to add your name to the class distribution list, please send a test message with the subject line *CS231 TEST* to the instructor's email address.