

Programming with Java

Boston University

MET CS232-SA1, Summer 2020

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

Location: On-line

Instructor: Mike Hadavi

E-mail: hadavi@bu.edu

Office Hours: After class

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

COURSE DESCRIPTION

This course covers the elements of object-oriented programming and the Java Programming Language. Primitive data types, control structures, methods, classes, arrays and strings, inheritance and polymorphism, interfaces, creating user interfaces, exceptions and streams. Laboratory course. 4 cr.

PREREQUISITE

MET CS201 or instructor's consent or programming experience in a high-level language other than Java.

TEXT

JAVA, An Introduction to PROBLEM SOLVING AND PROGRAMMING,
(Eight Edition, 2018), by Walter Savitch, published by Pearson, ISBN-13: 978-0-13-446203-5.

GRADING

| | |
|-------------------------|-----|
| Programming assignments | 45% |
| Homework assignments | 10% |
| Exam | 45% |

PROGRAM EVALUATION CRITERIA

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

Murphy's Law of Programming

"The sooner you start coding your program, the longer it is going to take"

continued...

SCHEDULE (very tentative)

| DATE | TOPIC | READING (TEXT CHAPTER) |
|------------|---|------------------------|
| Thu, 05/21 | Introduction, number systems | 1 |
| Tue, 05/26 | Basic Computation | 2 |
| Thu, 05/28 | Flow of Control | 3, 4 |
| Tue, 06/02 | Defining Classes, Objects, and Methods | 5, 6 |
| Thu, 06/04 | Arrays | 7 |
| Tue, 06/09 | Inheritance, Polymorphism, and Interfaces | 8 |
| Thu, 06/11 | Exception Handling | 9 |
| Tue, 06/16 | Streams and File I/O | 10 |
| Thu, 06/18 | Dynamic Data Structures and Generics | 12 |
| Tue, 06/23 | GUI, Swing | 13, 15 |
| Thu, 06/25 | Review | |
| Tue, 06/30 | Exam | |

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.
- Your programs must be done in Java. One point will be deducted from the grade for each class a programming assignment is late after a one-class grace period.
- Be sure to see bu.edu/summer. You'll find lots of useful information, 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 *CS232 TEST*, and your name in the body of the message to the instructor's email address.