Programming with Java,
Boston University

MET CS 232, Summer 2018

Day: Monday/Wednesday , 6:00-9:30 PM
Location: Boston Campus, Building: MCS, Room: B25
Instructor: Mike Tizio
E-mail: mtizio@bu.edu
Office Hours: Before class (5:00 PM to 6:00 PM)

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, applets, exceptions and streams. Laboratory course. 4 cr.

PREREQUISITE

Programming experience in a high-level language other than Java.

LEARNING OBJECTIVES

- To understand the essential concepts in computer science
- To be introduced to object oriented programming
- To learn the Java programming language

TEXT

Required: Java: An Introduction to Problem Solving and Programming, 7/E, by Walter Savitch, copyright 2015, published by Pearson Education Inc., ISBN-13: 978-0-13-376626-4.

GRADING

Programming assignments/Homework	40%
Class Participation and Attendance	10%
Midterm	25%
Final	25%

PROGRAM EVALUATION CRITERIA

Program correctness	60%
Documentation	20%
Readability	20%

SCHEDULE

DATE	TOPIC	READING (TEXT CHAPTER)
07/02	Introduction, Overview/UML/Pre and Post Conditions	1
07/06*	Basic Computation Primitive Types, Strings, Interactive I/O	2
07/09	Flow of Control: Branching and Loops	3, 4
07/11*	Defining Classes and Methods, Objects and Methods	5, 6
07/16	Arrays	7
07/18*	Arrays/Array Lists/Review (Midterm Q & A)	7, 12.1
07/23	Midterm	
07/25*	Inheritance/Interfaces/Polymorphism/Exception Handling (midterm/homework review and demo)	8, 9
07/30	Streams, File I/O, and Networking	10
08/01*	Other Topics(Dynamic Data Structures)/Object Oriented design/Cloud Basics/Recursion	11, 12
09/06	Window Interfaces - Swing Objects/JavaFX	6.8, 8.5, 7.6, 1.4, 3.4, 4.3, 5.4, 6.8, 8.5, 9.4
08/08	Final Presentation	

IMPORTANT NOTES

- Assignments will not be accepted past their due date.
- 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. All programming assignments must include the source code, pseudo code (program outline) including test plan, as well as the UML class diagrams. Programming assignments will not be accepted later than the end of the class the day it is due. Students will not receive credit for late homework.
- Be sure to get a copy of the 2018 Summer Schedule. 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.