



Department of Computer Science
CMPT 360 Object Oriented Design with JAVA
Course Syllabus Spring 2016

Instructor

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Office Hours: W 3:30 pm – 4:30 pm, R 4:30 pm – 5:30 pm or by appointment in RLC 203

Class Hours: MR 1:30 pm – 2:45pm in RLC 105 and W 2:00pm – 2:50pm in RLC 107

Overview

Fundamentals of JAVA programming is introduced, with emphasis on programming methodology, object oriented principles and problem solving. Topics include basic constructs and syntax of JAVA language as well as object-oriented features such as objects, classes, inheritance, polymorphism, encapsulation and interfaces. This course will also introduce advance topics such as multithreading, database programming, network programming and GUI basics.

Prerequisites

CMPT 102 or CMPE 202 or EECE 202

Textbook

MyProgrammingLab with Pearson eText -- Access Card -- for Intro to Java Programming, Comprehensive Version, 10/e, 10/E Liang ©2015 | Pearson | Published: 01/13/2014

ISBN-10: 0133762513 | ISBN-13: 9780133762518

Course Objectives

- Learn to analyze a problem and construct a JAVA program to solve it
- Learn to design and implement object oriented programs
- Learn to write simple file IOs
- Learn to deal with exceptions
- Learn the basics of multithreading
- Learn to connect to an external database and write queries
- Learn to design a simple client-server program
- Learn to create GUI

Course Outcomes

- Able to understand the form and structure of JAVA programming language
- Analyze a problem and construct a JAVA program to solve it
- Able to understand and implement object oriented concepts such as inheritance, polymorphism, encapsulation, interfaces and abstract classes using JAVA



- Able to use file IO and handle exceptions
- Able to understand and implement multithreading in JAVA
- Able to connect to a database and run queries using JAVA
- Able to implement JAVA networking programs to create a simple client-server interaction
- Able to create simple GUIs and event-driven programs using JAVA

Tentative List of Topics

- Introduction to JAVA
- Control Structures and Loops
- Arrays
- Methods
- Exception handling and text IO
- Objects and Classes
- Inheritance and Polymorphism
- Database Programming
- Network Programming
- Multithreading
- GUI Basics and Event-Driven Programming
- Additional topics at the discretion of the instructor, time permitting

Grades (Method of Evaluation)

Students will be evaluated based on their performance and scores obtained in multiple class and take-home assignments as well as group projects throughout the semester. There will be no exams as such. Final grades will be based on the following scale: A (95-100), A- (90-94), B+ (85-89), B (80-84), B- (75-79), C+ (70-74), C (65-69), C- (60-64), D (50-59), F (<50). The instructor reserves the right to adjust the grading percentages and scale if necessary.

Success in Class

- Read the assigned pages in the book as per the class discussion.
- Do as many exercises as possible even if they are not assigned.
- Ask questions about parts of reading or lecture which you do not understand.

Get help before you are completely lost. I am available to help you via e-mail, in the classroom, or in my office.

Attendance Policy

Attendance in every lecture is mandatory. Being in the class on time is equally important too. Any absence for valid reason will be required to be supported with proper documentation.

Cheating Policy

Cheating on a programming assignment will result in zero credit for all students involved. Programming assignments may not be solved in collaboration, unless specifically stated in the assignment. Cheating on an exam will result in an "F" in the course. You may discuss problems with each other. Where does discussion end and cheating start? You may not copy lines of code from anybody or anywhere. You may



not use code in your assignments that you did not write. As a general rule, if you don't understand the code and can't explain the code, you can't use the code.

Center for Academic Success

Tutoring and support to students is offered in the Learning Center (DLS 206), Leo Learning Center (Leo 117) and the Writing Center (Mig 203). For more information please visit:

<http://manhattan.edu/academics/center-academic-success>

Policy on Students with Disabilities

Students with Disabilities should contact the Specialized Resource Center with their appropriate documentation, to obtain an "Academic Adjustment/Auxiliary Aid" form. When the student presents this completed form to the professor, the professor will then confer with the student on the fulfillment of the adjustments/aids listed on the form.

Academic Integrity Expectation

In accordance with the Manhattan College policy on Academic Integrity, students are expected to do their own work. If they use somebody else's work, then that fact should be documented. Individual work is to be done individually and not copied from others and it is expected that you will perform all exams without consulting others and do your own work on any assignments. Consulting with others on general approaches to take in an assignment is considered acceptable, but copying assignments from others or working the majority of the assignment together is not acceptable. Of course group work is done in a group. See <http://manhattan.edu/community-standards-and-student-code-conduct> for more information on Manhattan College policy on Academic Integrity.