

YORK TECHNICAL COLLEGE COURSE SYLLABUS

COURSE INFORMATION

Course Prefix/Number: CPT 237

Course Title: Advanced Java Programming Lec

Hours/Week 3.0

Lab Hours/Week 0.0 Credit

Hours/Semester 3.0

DL ATTENDANCE/VA STATEMENT

TEXTBOOK INFORMATION

COURSE DESCRIPTION

This course is a study of advanced topics of the java programming language by building on a basic knowledge of the java language. Topics covered will include multi-threading, swing classes, swing event models, advanced layout managers, the javabean component model, network programming and server-side programming.

COURSE COMPETENCIES

Upon successful completion of this course, the student should be competent to complete the following tasks:

Module 1 - Introduction to Java Graphics, Event and Error Handling

- Explain the concept of Swing.
- Explain what GUI programming entails.
- Explain the relationship between AWT and Swing.
- Explain the components of Swing.
- Explain the concept of event handling.
- Explain the concept of error handling.
- Create a GUI Java application.

Module 2 – Collections, ArrayList, Iterators, Interfaces, and Exceptions

- Demonstrate the use of collections, arraylist, and iterators.
- Describe the differences between collections, arraylist, and iterators.
- Explain the Java exception hierarchy.
- Code programs that incorporate exception handling.

Module 3 – File and Database Processing

- Explain data Hierarchy.
- Solve problems requiring use of files.
- Demonstrate how to setup database connections.
- Explain SQL concepts.
- Solve problems requiring the use databases.
- Find and correct syntax and logic errors in programs containing file or database elements.

Module 4 – Web Applications

- Explain multi-tier applications.
- Install and administer Web server software.
- Create Java Server pages.

MINIMAL STANDARDS

Minimal standards of performance on all course competencies for receiving credit for the course are indicated by 60% overall accuracy on evaluation instruments that address the course competencies listed above.

Required standards of performance on all course competencies for enrollment in subsequent higher-level computer technology courses are indicated by 70% overall accuracy on evaluation instruments that address the course competencies listed above.

COURSE REQUIREMENTS

Students are responsible for attending all scheduled class meetings until they have completed all course requirements. Students are responsible for all material covered and for all assignments made in all classes. Students who are absent from a class more than 20% of the hours assigned will be withdrawn. Any student caught cheating or involved in other academic dishonesty will be given a grade of zero and will be subject to further disciplinary action.

EVALUATION STRATEGIES/GRADING

Module 1 – 15%

Module 2 – 15%

Module 3 – 30%

Module 4 – 40%

Grading Scale

90-100 – A

80- 89 – B

70-79 – C

60-69 – d

Below 60 -- F

ENTRY LEVEL SKILLS

A student entering this course should be familiar with structured programming concepts, have adequate flowcharting skills and be familiar with the Windows environment. They should possess elementary Java programming skills.

Prerequisites: CPT 236 – Minimum grade of “C.”

Co-requisites: None