

CSC 151 JAVA Programming

COURSE DESCRIPTION:

Prerequisites: None

Corequisites: None

This course introduces computer programming using the JAVA programming language with object-oriented programming principles. Emphasis is placed on event-driven programming methods, including creating and manipulating objects, classes, and using object-oriented tools such as the class debugger. Upon completion students should be able to design, code, test, debug JAVA language programs.

Course Hours per Week: Class, 2. Lab, 3. Semester Hours Credit, 3.

LEARNING OUTCOMES:

Upon completing requirements for this course, the student will be able to:

1. Create a software application using the Java programming language.
2. Debug a software application written in the Java programming language.
3. Test a software application written in the Java programming language.

OUTLINE OF INSTRUCTION:

- I. Introduction to Computers and Java
- II. Java Fundamentals
- III. Decision Structures
- IV. Loops and Files
- V. Methods
- VI. A First Look at Classes
- VII. Arrays and the ArrayList Class
- VIII. A Second Look at Classes and Objects
- IX. Text Processing and More about Wrapper Classes
- X. Inheritance
- XI. Exceptions and Advanced I/O

REQUIRED TEXTBOOK AND MATERIAL:

The textbook and other instructional material will be determined by the instructor.