

Date Adopted: August 1998

Date Reviewed: Aug 2015

Date Revised: Aug 2015

CIS 255 Java Programming

I. CIS 255 Java Programming – 3 Semester Hours

II. Course Description

This course is an introduction to the Java programming language. Topics in this course include object-oriented programming constructs, Web page applet development, class definitions, threads, events and exceptions. Upon completion, the student will be able to demonstrate knowledge of the topics through the completion of programming projects and appropriate tests.

III. Prerequisite

CIS 150

IV. Textbook

Textbook: Starting Out with Java: From Control Structures through Objects, 6th ed.

Publisher: Pearson

Author: Gaddis

V. Course Objectives

- A. The student will be able to design, code, enter, compile, debug, execute and document Java applets.
- B. The student will have a working knowledge of operational statements in Java including those for input/output, program execution control and data manipulation.
- C. The student will develop an understanding of basic data types, class definitions and common class library packages.
- D. The student will understand and be capable of employing method definitions.

VI. Course Outline of Topics

- A. The student will be able to design, code, enter, compile, debug, execute and document Java applets.
 1. The student will be able to describe and implement the steps involved in developing Java applets as solutions to problems using object-oriented design techniques.
 2. The student will be able to execute the steps necessary to enter and compile Java applets.
 3. The student will be able to follow the steps (compiler dependent) for testing and correcting applets written in Java.
- B. The student will have a working knowledge of operational statements in Java including those for input/output, program execution control and data manipulation.
 1. The student will be able to apply the appropriate language constructs for input and output.
 2. The student will be able to apply the program execution control structures for selection and looping.
 3. The student will be able to apply the arithmetic and logical operators.
- C. The student will develop an understanding of basic data types, class definitions and common class library packages.
 1. The student will understand and be able to distinguish the basic data types that can be declared in a Java applet.
 2. The student will understand class definitions and be able to write and use class definitions in Java applets.
 3. The student will be able to discuss the syntax and purpose of threads in Java applets.

4. The student will understand and be able to use common class library packages in Java applets.
- D. The student will understand and be capable of employing method definitions.
1. The student will understand the basic structure and purpose of methods and be able to write and call methods in Java applets.
 2. The student will be able to discuss the syntax and purpose of method exceptions in Java applets.

VII. Evaluation and Assessment

Evaluation and assessment will be determined by the instructor and specified on the instructor's class syllabus. Grades will be based upon following scale: A = 90 – 100%, B = 80 – 89%, C = 70 – 79%, D = 60 – 69%, and F = below 60%.

VIII. Attendance

Students are expected to attend all classes for which they are registered. Students who are unable to attend class regularly, regardless of the reason or circumstance, should withdraw from that class before poor attendance interferes with the student's ability to achieve the objectives required in the course. Withdrawal from class can affect eligibility for federal financial aid.

IX. Statement on Discrimination/Harassment

The College and the Alabama State Board of Education are committed to providing both employment and educational environments free of harassment or discrimination related to an individual's race, color, gender, religion, national origin, age, or disability. Such harassment is a violation of State Board of Education policy. Any practice or behavior that constitutes harassment or discrimination will not be tolerated.

X. Americans with Disabilities

The Rehabilitation Act of 1973 (Section 504) and the Americans with Disabilities Act of 1990 state that qualified students with disabilities who meet the essential functions and academic requirements are entitled to reasonable accommodations. It is the student's responsibility to provide appropriate disability documentation to the College. The ADA Accommodations Office is in FSC 305 (205-856-7731).