

Common Course Outline

CINS 236

Java Programming

4 Semester Hours

The Community College of Baltimore County

Description

Introduction to Java Programming

Introduces Java programming including methods of designing, coding, compiling, debugging, and executing programs using the object oriented Java programming language; utilizes commercial Java development environment such as Visual Studio to create applications.

3 credits: 2 lecture hours, 2 laboratory hours.

Prerequisite: CINS 225 or CMSC 201 or consent of the Program Director

Overall Course Objectives

Upon completion of this course the student will be able to:

1. Develop moderate complexity Java programs
2. Develop Java applications
3. Develop Java applets
4. Integrate Java applets into Web pages
5. Use an Integrated Development Environment such as Visual J++
6. Debug and maintain applications written in Java
7. Access the Graphical User Interface (GUI) from Java Programs
8. Develop, write, and maintain program documentation

Major Topics

1. History of Java language development
2. Java development tools
3. Java bytecode and the Virtual Machine (VM)
4. Developing Java applications
5. Methods, Classes, and Objects
6. Selection and Repetition
7. Arrays
8. Strings
9. Developing Java applets
10. Using Graphics
11. Graphical User Interface Development, AWT and Swing
12. Using Layout managers
13. Events and event handling

14. Exception handling

Course Requirements

Grading: Grading procedures will be determined by the faculty member, will be provided the first week of class, and will include:

1. Minimum of four programming projects
2. Minimum of four tests.
3. Comprehensive final exam.

Other Course Information

This course meets the second level programming language requirement in CIS: Programming and is a CIS elective.

This course is taught in a lecture/computerized environment.

This course is the first course in a two-course sequence.