

# ILLINOIS VALLEY COMMUNITY COLLEGE



## Course Syllabus

**Division: Occupational Technologies**

**Course: CSI 2200 – Java Programming**

Date: July 5, 2004  
Semester Hours: 3  
Lecture hours per week: 2  
Labs hours per week: 2  
Seminar hours per week:  
Other hours:  
Prerequisite: CSI 2007  
Semester Offered: Spring  
Instructor(s): Tannahill

### I. CATALOG DESCRIPTION

Java is one of the newest programming languages, which is used to create robust Internet applications. This course provides a foundation for programming in Java.

The elements of the language are covered, as well as techniques and strategies for implementing applications. Students will complete several programming assignments.

### II. EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

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

1. Understand Java principles
2. Use applets
3. Use widgets
4. Use Visual design
5. Use events and actions
6. Launch an applet into cyberspace

#### **Outcome 1 – Students will understand Java principles**

Competency 1.1 - Students will understand data types

Competency 1.2 –Students will declare variables

Competency 1.3 - Students will understand numeric operators and assignment statements

Competency 1.4 - Students will declare, store to, and sort arrays

Competency 1.5 - Students will use the Thread class

Competency 1.6 - Students will use the String class

Competency 1.7 - Students will use Input/Output classes

Competency 1.8 - Students will use exception handlers

Competency 1.9 - Students will use Java and applet security

## **Outcome 2 - Students will use applets**

Competency 2.1 - Students will use graphics, color, and font classes

Competency 2.2 - Students will use position and size classes

## **Outcome 3 - Students will use widgets**

Competency 3.1 –Students will use label, TextComponet, TextField, and TextArea classes

Competency 3.2 - Students will use active widgets classes such as, Button, CheckBox, Choice, and List classes

## **Outcome 4 - Students will use Visual Design**

Competency 4.1 - Students will understand container organization methods

Competency 4.2 - Students will use the Panel class

Competency 4.3 - Students will understand container layout methods

Competency 4.4 - Students will use FlowLayout, BorderLayout, and GridLayout classes

Competency 4.5 - Students will use the Canvas class

Competency 4.6 - Students will ass menu components, MenuBars, MenuItems, and PopUpMenus

## **Outcome 5 - Students will understand events and actions**

Competency 5.1 - Students will use decision and repetition structures

Competency 5.2 - Students will use events driven from the keyboard, the mouse, and from text

Competency 5.3 - Students will use Listener interfaces

## **Outcome 6- Students will launch an applet into cyberspace**

Competency 6.1 – Students will use audio clips, images, files, and/or animation

Competency 6.2 – Students will use Button classes

Competency 6.3 - Students will understand URLs

## **III. COURSE CONTENT:**

Introduction and requirements

Java background

Java basics

Object oriented programming

Applets

Widgets

Events and actions

Methodical programming

Collections

Exceptions

Input/Output

Threads

Applets and the Internet

## **IV. INSTRUCTIONAL METHOD:**

Lecture

Lab - hands-on training  
Testing  
Programming assignments  
Teacher demonstration  
Group work

## **V. INSTRUCTIONAL MATERIALS:**

Computer overhead projection system  
Computer lab

*Programming.java*, Rick Decker and Stuart Hirshfield

## **VI. STUDENT REQUIREMENTS AND METHODS OF EVALUATION:**

Develop an understanding and/or a comprehensive knowledge of the items listed as course content.

1. **Read** required material on the topic
2. **Attend** class on current topic
3. **Complete** all tests and homework
4. **Ask** questions about any misunderstood area either in class, during office hours, or of the tutor
5. **Join** in discussions

### **Grading Scale**

A	90-100%
B	80-89%
C	70-79%
D	60-69%