

# **CSC-K223 Java Programming I**

## **Three Rivers Community College**

### **Syllabus**

### **Spring 2012**

### **Course Information:**

- Title: CSC-K223 Java Programming 1
- Time: Lecture: T 5:20 – 8:05 pm, Lab: 8:10 – 9:50 pm
- Location: Lecture: E218, Lab: E218

### **Instructor Information:**

- Instructor: Joe Johnson
- Telephone: 860-823-2818 (Office), 860-805-3670 (C)
- Email: [jjohnson@trcc.commnet.edu](mailto:jjohnson@trcc.commnet.edu)
- Office hours: Tuesday: 1-4

### **Learning Outcomes:**

- After successful completion of this course, the student should have an understanding of the core features of the Java programming language. These features include its syntax for program structure – sequence, looping, branching, its object-oriented features for supporting encapsulation, inheritance, and polymorphism, and its features for doing file I/O and elementary graphics programming. The student should also have an understanding of Java's facility for automated memory management through automatic garbage collection. Finally, the student should also have an introductory understanding of data structures (arrays, linked lists, trees, and hash tables), their associated algorithms for searching, inserting, and deleting, the relative performance of these algorithms, and how to implement these algorithms in Java.

### **Texts:**

- Radhika S. Grover, Programming with Java: A Multimedia Approach, Jones and Bartlett Publishing, ISBN 978-1-4496-3861-0 (Required)

## Course Requirements:

- Regular programming assignments based on the topics covered in class (weekly or biweekly, depending on the topic) (40%)
  - It is extremely important you stay current with the material as it is cumulative – it builds on itself. Homework **MUST** be handed in **ON TIME AT THE BEGINNING OF CLASS** (not after the lab of the due date). No late homework will be accepted.
  - Do not procrastinate. Disciplined review of the material on a daily basis will pay much greater dividends than trying to cram just before the exam or the night before an assignment is due in the form of a deeper understanding of the material and much lower stress level. Do yourself a favor and take this course a little bit every day, one day at a time....
  - Depending on the difficulty level of the assignment, we will review the solutions to the problems in class after they're due.
- Midterm Exam (20%)
- Final Exam (Cumulative) (30%)
- Participation in classroom/online discussions (10%)

## Pre-requisites

- CSC-K108 Intro to Programming

## Schedule

Week	Date	Topic	Reading Assignment	Programming Assignment
1	01/24	Introduction	Chapter 1	Hello World (of course!)
2	01/31	Introduction to Classes and Objects	Chapter 2	Draw a car (2.17)
3	02/07	Programming Basics, Intro to Eclipse	Chapter 3	Draw a stick figure (3.20)
4	02/14	Control Flow Statements	Chapter 4	Inverted Color Image (4.21)
5	02/21	User-Defined Classes	Chapter 5	Image

			Differencing (5.19)
6	02/28	Inheritance	Chapter 6    Animate a Ship (6.13)
7	03/06	Midterm Exam	
8	03/13	Arrays and Strings	Chapter 7    Image Convolution (7.28)
	03/20	*****SPRING BREAK*****	
9	03/27	Interfaces and Nested Classes	Chapter 8    Palette (8.15)
10	04/03	GUI Programming	Chapter 9    Tic-Tac-Toe (9.23)
11	04/10	Exception Handling	Chapter 10    Automotive Diagnostics (10.14)
12	04/17	File I/O	Chapter 11    Echo Effect (11.13)
13	04/24	Generics and Collections	Chapter 12    PhotoFinder (12.15)
14	05/01	More on GUI Programming	Chapter 13    Asteroids (make-up)
15	05/08	Multithreaded Programming	Chapter 14
16	05/15	Final Exam	

## Academic Integrity

- Three Rivers' catalog defines various forms of academic dishonesty and procedures for responding to them. All forms are violations of the trust between students and teachers. Students should familiarize themselves with the penalties for plagiarism and other forms of cheating.

