CSC-K223 – Java Programming 1

Course Syllabus

Semester: Fall 2016

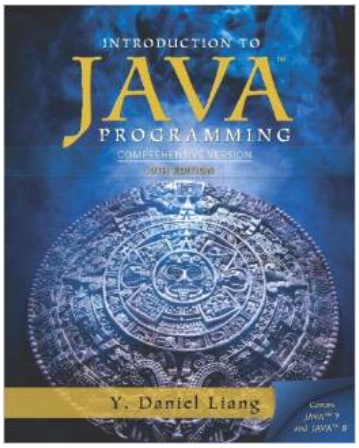
Instructor: Dr. Joseph Johnson
Email: jjohnson@trcc.commnet.edu

Course Meeting Times:
Lecture: Tuesday: 5:20 pm – 8:05 pm
Lab: Tuesday: 8:10 pm – 9:50 pm

Office Hours:
Tuesday: 9:30 am – 11:00 am
Tuesday: 1:00 – 2:00 pm
Thursday: 1:00 – 2:00 pm

Campus Office: C162
Campus Phone: (860) 215-9440

Required Text:



Introduction to Java Programming, Comprehensive Version, 10th Edition, by Y. Daniel Liang, Prentice Hall Publishing, Copyright Year 2013. The Student Resource website, containing additional information including examples source code, solutions to even numbered problems, and links to software, is located at: http://www.cs.armstrong.edu/liang/intro10e.

This textbook is sold through the Three Rivers bookstore (ISBN-13: 9780133761313) bundled with the access code for the Prentice Hall Companion Website. It is not absolutely necessary to purchase the bundle – the textbook by itself will suffice - but you may have to purchase elsewhere in order to achieve this savings.

In this course, we will be using a software program called Eclipse that will facilitate building Java programs. Eclipse is an integrated development environment, or IDE. We will review the installation of this software in the first class. Eclipse is already installed on the workstations in the open lab (E112).

Course Description: This course expands coverage of programming concepts not covered in the Introduction to Programming course, including (but not limited to) such topics as object-oriented programming (classes, objects, inheritance, polymorphism, composition, aggregation, interfaces vs. implementations, etc.), web crawling, text manipulation using the String API, and exceptions.

Course Outcomes

At the conclusion of the course, the student should be able to:

- Construct an object-oriented design for a given programming problem by analyzing the problem domain – breaking the domain into its components and the relations between them – and then building object-oriented software whose components mirror these relationships.
- Arrive at the most effective solution architecture for a given software problem by analyzing various alternatives and arriving at a cohesive architecture based on well-supported inferences based on the nature of the problem, the features of the programming platform, and the required development time and user constraints.
- Successfully argue for the most effective solution to a programming problem, as needed when working with other members of a programming team.
- Understand the concept of recursion and be able to apply it judiciously in programming solutions by evaluating contexts in which recursion is appropriate vs. the alternative technique of iteration (looping). The student will be able to evaluate various programs using both alternatives to arrive at an evidence-based approach for deciding on the most appropriate technique.

Course Evaluation: Course evaluation will be based on computer assignments, quizzes, frequent and meaningful participation in discussions, and the final project. The final grade for this course will be determined by the following percentages:

Homework Assignments	60%
Mid-term Exam	15%
Final Exam	15%
Discussion Participation	10%

Class Assignments: Class assignments should be submitted on or before the due date and time. No assignments will be accepted after the due date. The lowest assignment grade will be dropped when calculating the final grade for the course. Assignments will be graded on accuracy, style and completeness (both program code and output are required for assignments). The details for each assignment, including work to be done and the due date and cutoff date, will be posted in that assignment's description in Blackboard.

Exams: There will be midterm and a final for the course, both in multiple-choice format, conducted online, based on the material covered in class (and presented in the text).

Course grades: Grades will be assigned as objectively as possible, according to the following scale (with plus or minus, as appropriate):

90 - 100%	A
80 - 89%	B
70 - 79%	C
60 - 69%	D
59% and Below	F

Withdrawing from the course: A student who simply stops submitting work will receive the grade earned on that work, usually a failing grade. To receive a "W" grade instead, apply for a withdrawal through the registrar's office by December 14th. A "W" will be entered on the student transcript but will not be included in the calculation of the GPA.

Academic Integrity: Students are expected to do their own work in this class. Working together to better understand the material is acceptable. Submitting duplicate work is not and will adversely affect the assignment grade. Actively participating in the discussion boards both to ask and to answer questions is expected of all students. Posting of detailed instructions for "how to" responses to questions is encouraged but posting of a complete solution is not. Example violations include but are not limited to:

- Copying or sharing a file or any portion of a file from another student.
- Sharing or allowing another student to copy your files or any portion of a file.
- Duplicating or distributing copies licenses for software programs and/or services.

Students with Disabilities: If you are a student with a disability and believe you will need support services and/or accommodations for this class, please contact the Disabilities Support Services at TRCC. Please note that the instructor cannot provide accommodations based upon disability until the instructor has received an accommodation letter from the Disabilities Counselor.

Course Outline

Topics	Week Of	Text Assignments
Review: Java Fundamentals	08/29	Chapter 1 - 8
Objects and Classes	09/05	Chapter 9
Thinking in Objects	09/12	Chapter 10
Thinking in Objects, contd.	09/19	Chapter 10
Inheritance	09/26	Chapter 11
Polymorphism	10/03	Chapter 11
Exception Handling and Text I/O	10/10	Chapter 12
Abstract Classes and Interfaces	10/17	Chapter 13
Midterm Exam (online)	**10/24**	
Java FX Basics	10/31	Chapter 14
Event-Driven Programming and Animations	11/07	Chapter 15
Recursion	11/14	Chapter 18
***** Thanksgiving – make-up *****	11/21	
Networking	11/28	Chapter 31
Java Database Programming	12/05	Chapter 32
Final Exam (online)	**12/16**	

Note: This course outline is subject to change as conditions warrant.

Digication: All students are required to maintain an online learning portfolio using a TRCC designed template. Through this electronic tool, students can see their own growth in college-wide learning. The student can keep and continue to use the Digication account after graduation. A Three Rivers General Education Assessment Team will select random works to improve the college experience for all. No names will be attached to the assessment work; it will remain private and anonymous for college improvement purposes. In class outlines, students will find recommended assignments which support various college-wide learning abilities. The student will have a tool which can integrate their learning from the classroom, school, and life and allow for another opportunity of learning at TRCC! Students will be able to make multiple portfolios.