# CSC-K224 – Java Programming 2

## Course Syllabus

Semester: Fall 2015

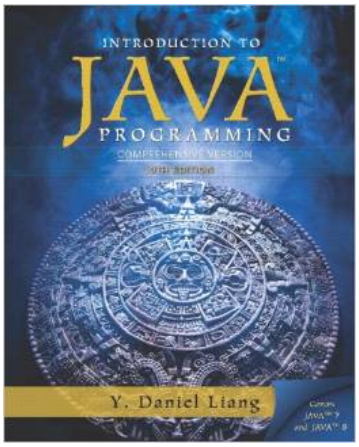
Instructor: Joseph Johnson
Email: jjohnson@trcc.commnet.edu

Course Meeting Times:
Lecture: Thursday: 5:20 – 8:05 pm
Lab: Thursday: 8:05 – 9:30 pm

Campus Office Hours:
Tuesday: 9:30 am – 11:00 am
Tuesday: 2:30 pm – 4:00 pm

Campus Office: C162
Campus Phone: (860) 823-2818

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).

**Supplies and Materials**: Removable storage device (memory stick, aka travel drive, USB drive, etc.) for students requiring use of on-campus computer labs for course completion

**Course Description**: This course will cover more advanced Java programming concepts, including, but not limited to, Java GUI programming principles, recursion, and data structures and algorithms (including lists, stacks, queues, hash tables)

**Course Objectives:**

- Introduce elementary data structures, including lists, stacks, queues, priority queues.
- Implement data structures in Java.
- Gain an understanding of recursion.
- Introduce other advanced programming concepts as time warrants, including networking, Java database programming, graphs.

**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 from the calculation of the final grade for the course. Assignments will be graded on professionalism, accuracy, style and completeness. 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:** A midterm and a final exam will be given, both in multiple-choice format, covering material from the text, assignments, and presentations.

**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.

**Course Outline:**

| Topics | Date | Text Assignments |
|---|---|---|
| Introduction to Data Structures - A Motivating Example | 09/03 | |
| Generics | 09/10 | Chapter 21 |
| Lists, Stacks, Queues, Priority Queues | 09/17 | Chapter 22 |
| Sets and Maps | 09/24 | Chapter 23 |
| Developing Efficient Algorithms | 10/01 | Chapter 24 |
| Implementing Lists, Stacks, Queues, and Priority Queues | 10/08 | Chapter 26 |
| Binary Search Trees | 10/15 | Chapter 27 |
| **Midterm Exam (online)** | **10/22** | |
| Hashing | 10/29 | Chapter 28 |
| Graphs and Applications | 11/05 | Chapter 30 |
| Graphs and Applications, contd. | 11/12 | Chapter 30 |
| Networking | 11/19 | Chapter 33 |
| ****** Thanksgiving – no class ****** | **11/26** | |
| Java Database Programming | 12/03 | Chapter 34 |
| Makeup class | 12/10 | |
| **Final Exam (online)** | **12/17** | |

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

**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.

**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.