CSC-K108-10360 - Introduction to Programming

Course Syllabus

Semester: Spring 2016

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

Course Meeting Times:

Lecture: Monday: 5:20 pm - 8:05 pm

Lab: Monday: 8:05 – 9:30 pm

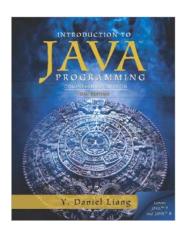
Office Hours: Tuesday:

Tuesday: 11:00 – 12:00 Thursday: 2:30 – 4:30 pm

Office: C162

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 (10 ed: 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.

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: Fundamentals of programming and program development techniques. Topics include problem solving, syntax, variables, data types, statements, functions, selection, repetition, references, arrays, and program structure.

Course Objectives

- o To provide the student with a broad introduction to computer science including computer design, programming, information processing and algorithmic problem solving.
- o Upon successful completion of this course, the student will be able to:
 - o Plan, design, code, test, and debug solutions to programming problems using the Java programming language
 - Use variables of types built in to the language, operators, and library functions in their programs
 - Use input and output streams to write interactive programs
 - Use relational expressions to accomplish selection, and loops to enable repetition in their programs.
 - Write their own methods, thus finding the solution of more complex problems, using the principle of breaking a large problem into smaller sub-problems
 - o Use more advanced data structures, such as arrays in their programs

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 will be assigned online. They must be submitted by the due date posted in the assignment. Late work will not be accepted. The lowest assignment grade will be dropped. Assignments will be graded on accuracy, style and completeness.

Exams: Exams will be conducted online in multiple-choice format and will cover material covered in 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% | В |
| 70 - 79% | C |
| 60 - 69% | D |
| 59% and Below | F |

Contacting Me: The best way to reach me is through email or during office hours. (See above).

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 May 9th. A "W" will be entered on the student transcript but will not be included in the calculation of the GPA.

Course Outline

| Topics | Week of | Text Assignments |
|---|---------|------------------|
| Introduction to Computers, Programs, and Java | 01/25 | Chapter 1 |
| Elementary Programming | 02/08 | Chapter 2 |
| Selections | 02/22 | Chapter 3 |
| Mathematical Functions, Characters, and Strings | 03/07 | Chapter 4 |
| Mid-Term Exam (online) | 03/14 | |
| Loops | 03/14 | Chapter 5 |
| ****** Spring Break – no class ******* | 03/21 | |
| Methods | 04/04 | Chapter 6 |
| Single-Dimensional Arrays | 04/18 | Chapter 7 |
| Multi-Dimensional Arrays | 05/02 | Chapter 8 |
| Final Exam (online) | 05/09 | |

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:

- o Copying or sharing a file or any portion of a file from another student.
- O Sharing or allowing another student to copy your files or any portion of a file.
- o 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 collegewide 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.