# CSC-K224 - JAVA PROGRAMMING 2

# FALL 2017 (ONLINE VIA BLACKBOARD LEARN) COURSE SYLLABUS

INSTRUCTOR: Dr. Eric Marsh

#### **CONTACT METHODS**

#### **PRIVATE**

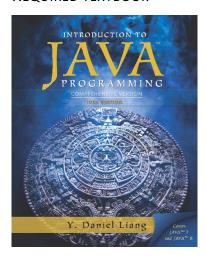
- Blackboard Learn message (preferred)
- wmarsh@trcc.commnet.edu (emergency only)

#### Public (Most Topics)

• Blackboard Learn discussion forums

Dr. Marsh has no on-campus presence. The goal is to reply within 48 hours using the above methods. Discussion posts will take precedence. Replies will typically be in the evening or on weekends.

#### REQUIRED TEXTBOOK



Introduction to Java Programming, Comprehensive Version, 10<sup>th</sup> Edition, by Y. Daniel Liang, Prentice Hall Publishing, Copyright 2013. The Student Resource website, (requires the access code, see below), 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, although you won't be able to access the online resources described above.

## SOFTWARE, SUPPLIES, AND MATERIALS

- We will be using an integrated development environment (IDE) called Eclipse that will facilitate building Java programs. It is already installed on the workstations in the open lab (E112).
- Removable storage device for students requiring use of on-campus computer labs for course completion.

# COURSE DESCRIPTION

This course covers more advanced Java programming concepts, focusing on data structures and algorithms, with specific topics including lists, stacks, queues, priority queues, sets, maps (hash tables), and binary search trees, time complexity, space complexity, and recursion. The course also discusses building these data structures from scratch as well as leveraging the Java API.

#### **C**OURSE 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.

#### **GRADING CRITERIA**

Grades will be assigned as objectively as possible, with the following components:

Homework assignments	60%
Midterm exam	15%
Final exam	15%
Blackboard discussions	10%

The following scale (with plus or minus, as appropriate) will be used for determining the final grade (a class curve may be used at the instructor's discretion):

90-100%	Α
80-89%	В
70–79%	С
60-69%	D
<= 59%	F

#### HOMEWORK ASSIGNMENTS

Several programming assignments will be assigned throughout the semester, mostly comprising exercises from the textbook. These assignments will each have a due date/time and late submissions will not be accepted. At the end of the course, the lowest assignment score will be discarded.

#### 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 11<sup>th</sup>. A "W" will be entered on the student transcript but will not be included in the calculation of the GPA.

### **CLASS CANCELLATIONS**

This is a fully online course, so college delays and closures will rarely affect our schedule. If there is an impact (for example, a widespread power outage), then the instructor will inform you of any changes to the schedule or deadlines.

#### Course pace and late work

Though this online course affords great flexibility, it is not self-paced. Late assignments will not be accepted.

# **C**OURSE OUTLINE

Week #	Week of	Topics	Textbook
			chapter
1	8/29	Introduction to data structures	
	-	mili oddolion to data stractares	
2	9/5	Recursion	18
3	9/12	Generics	19
4	9/19	Lists, Stacks, Queues, Priority Queues	20
5	9/26	Sets and Maps	21
6	10/3	Efficient Algorithms	22
7	10/10	Sorting	23
8	10/17	Implementing Lists, Stacks, Queues, and Priority Queues	24
9	10/24	Binary Search Trees	25
10	10/31	Midterm Exam	
11	11/7	Hashing	27
12	11/14	Graphs and Applications	28
	11/21	Thanksgiving week	
13	11/28	Weighted Graphs	29
14	12/5	Review	
15	12/12	Final Exam	

Note: This course outline is subject to change.

#### **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.

#### **SEXUAL MISCONDUCT**

BOARD OF REGENTS FOR HIGHTER EDUCATION AND CONNECTICUT STATE COLLEGES AND UNIVERSITIES POLICY REGARDING SEXUAL MISCONDUCT REPORTING, SUPPORT SERVICES AND PROCESSES POLICY

Statement of Policy for Public Act No. 14-11: An Act Concerning Sexual Assault, Stalking and Intimate Partner Violence on Campus: "The Board of Regents for Higher Education (BOR) in conjunction with the Connecticut State Colleges and Universities (CSCU) is committed to insuring that each member of every BOR governed college and university community has the opportunity to participate fully in the process of education free from acts of sexual misconduct, intimate partner violence and stalking. It is the intent of the BOR and each of its colleges or universities to provide safety, privacy and support to victims of sexual misconduct and intimate partner violence."

# UNITED STATES DEPARTMENT OF EDUCATION AND OFFICE OF CIVIL RIGHTS TITLE IX STATEMENT OF POLICY

Title IX of the Education Amendments of 1972 (Title IX) prohibits discrimination based on sex in education programs and activities in federally funded schools at all levels. If any part of a school district or college receives any Federal funds for any purpose, all of the operations of the district or college are covered by Title IX.

Title IX protects students, employees, applicants for admission and employment, and other persons from all forms of sex discrimination, including discrimination based on gender identity or failure to conform to stereotypical notions of masculinity or femininity. All students (as well as other persons) at recipient institutions are protected by Title IX – regardless of their sex, sexual orientation, gender identity, part-or full-time status, disability, race, or national originin all aspects of a recipient's educational programs and activities.

If any student experiences sexual misconduct or harassment, and/or racial or ethnic discrimination on Three Rivers Community College Campus, or fears for their safety from a threat while on campus, please contact Edward A. Derr, the Diversity Officer and Title IX Coordinator:

Edward A. Derr
Title IX Coordinator and Diversity Officer
Admissions Welcome Center, Office A116
574 New London Turnpike, Norwich CT 06360
860.215.9255, EDerr@trcc.commnet.edu