CSC-K224 – JAVA PROGRAMMING 2

COURSE SYLLABUS FALL 2019 (ONLINE VIA BLACKBOARD LEARN)

INSTRUCTOR: Dr. Eric Marsh

CONTACT METHODS

PRIVATE (ONLY PRIVATE MATTERS)

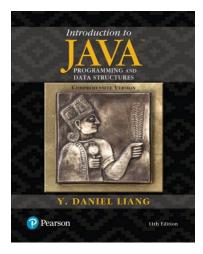
- Blackboard Learn message (preferred)
- <u>wmarsh@trcc.commnet.edu</u> (emergency only)

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 and Data Structures (comprehensive), 11th Edition, by Y. Daniel Liang, Prentice Hall Publishing, Copyright 2018 (ISBN-13: 9780134670942). The resource website, (requires access code inside the front cover of your book), containing additional information including example source code, solutions to even numbered problems, and links to software, is located at: http://www.cs.armstrong.edu/liang/intro11e/.

SOFTWARE, SUPPLIES, AND MATERIALS

- Eclipse IDE: <u>https://www.eclipse.org/downloads/</u>. The instructor will be using version 2019-06, 64-bit.
- Java SE (JDK): <u>https://www.oracle.com/technetwork/java/javase/downloads/jdk8-downloads-2133151.html</u>. The instructor will be using version 8u221, and it is highly recommended that you also use this version if possible, and in any case you must use Java 8 (8uXXX).
- 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.

GRADING CRITERIA

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

Homework assignments	30%	(300 points)
Quizzes	11%	(110 points)
Blackboard discussions	24%	(240 points)
Midterm exam	5%	(50 points)
Final exam	10%	(100 points)
Project	20%	(200 points)
	100%	(1000 points)

HOMEWORK ASSIGNMENTS (30% OF OVERALL GRADE)

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.

QUIZZES (11% OF OVERALL GRADE)

There will be a weekly quiz to go with each textbook chapter. You can take each of these as many times as you like within the week it was assigned.

BLACKBOARD DISCUSSIONS (24% OF OVERALL GRADE)

Most weeks will have an associated discussion forum, where there will be a question related to the week's lesson. You will receive 10 points for your thoughtful answer to the question. After you answer, you will see responses of other students. You will receive 10 additional points for your thoughtful response to one of their posts.

PROJECT (20% OF OVERALL GRADE)

The project is intended to provide practical experience applying the concepts learned this semester. There will be several milestones, culminating in a working program.

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 the designated date. 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 generally be accepted.

	Start	End				
Week	date	date	Торіс	Chapter	Assignment	Project
1	27-Aug	2-Sep	Introduction to Data Structures			
2	3-Sep	9-Sep	Recursion	18	1	
3	10-Sep	16-Sep	Generics	19		
4	17-Sep	23-Sep	Lists, Stacks, Queues, and Priority	20	2	M 0.5
5	24-Sep	30-Sep	Sets and Maps	21		
6	1-Oct	7-Oct	Developing Efficient Algorithms	22	3	M 1
7	8-Oct	14-Oct	Sorting	23		
8	15-Oct	21-Oct	Midterm Exam (10/17 -> 10/19)			
9	22-Oct	28-Oct	Implementing Lists, Stacks, Queues	24	4	M 2
10	29-Oct	4-Nov	Binary Search Trees	25		
11	5-Nov	11-Nov	Hashing	27	5	M 2.5
12	12-Nov	18-Nov	Graphs and Applications	28		
13	19-Nov	25-Nov	Weighted Graphs	29	6	
	26-Nov	2-Dec	Thanksgiving			Final
14	3-Dec	9-Dec	Review			
15	10-Dec	15-Oct	Final Exam (12/12 -> 12/14)			

COURSE OUTLINE

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. *Academic dishonesty* shall in general mean conduct which has as its intent or effect the false representation of a student's academic performance, including but not limited to:

- cheating on an examination,
- collaborating with others in work to be presented, contrary to the stated rules of the course,
- plagiarizing, including the submission of others' ideas or papers (whether purchased, borrowed, or otherwise obtained) as one's own,
- stealing or having unauthorized access to examination or course materials,
- falsifying records of laboratory or other data,
- submitting, if contrary to the rules of a course, work previously presented in another course, and
- knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

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 in Digication that uses the college template.

NON-DISCRIMINATION POLICY

Three Rivers Community College does not discriminate on the basis of race, color, religious creed, age, sex, national origin, marital status, ancestry, present or past history of mental disorder, learning disability or physical disability, sexual orientation, gender identity and expression, or genetic information in its programs and activities. In addition, the College does not discriminate in employment on the basis of veteran status or criminal records. The following person has been designated to handle inquiries regarding the non-discrimination policies:

Title IX Coordinator

Three Rivers Community College 574 New London Turnpike Norwich, CT 06360 860-215-9208

SEXUAL MISCONDUCT

Three Rivers Community College strongly encourages all students to report any incidents of sexual misconduct, which includes, but is not limited to, sexual harassment, intimate partner violence, and sexual assault. Students have the right to the prompt and fair resolution of all claims, and the College will preserve the confidentiality of all who report to the fullest extent possible and allowed by law. College employees will explain the limits of confidentially before information about the incident is revealed. To report sexual misconduct, or to learn more about your options, please contact the Title IX Coordinator. If you need immediate, confidential assistance, please call the Sexual Assault Crisis Center of Eastern Connecticut hotline at 860-437-7766.

Title IX Coordinator Three Rivers Community College 574 New London Turnpike Norwich, CT 06360 860-215-9208

Sexual Assault Crisis Center of Eastern Connecticut Hotline: 860-437-7766 Office: 860-442-0604 78 Howard Street, 2nd Floor New London, CT 06320