CS 2336 – In Person Computer Science II (Java)
Spring 2025 Syllabus UTD

INSTRUCTOR INFORMATION

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Grader Information:	Name	Jahnavi Dhulipalla
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COURSE INFORMATION

Course Number	CE/CS/TE 2336.**501**
Credit Hours	3
Meeting Time	Tue and Thu 5:30 – 6:45 PM
Room	ECSS 2.306

Course Prerequisite: CE/CS/TE 1336 with a grade of C or better or equivalent.

Description of Course Content: Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Includes comprehensive programming projects. Programming language of choice is Java.

Textbook: Introduction to JAVA Programming 10th edition – Comprehensive Version; Liang, Y. Daniel; Pearson Publishing ISBN 0-13-376131-2

Course Learning Outcomes: Students will be able to implement different data structures using the Java programming language. They will be able use different data structures to program solutions to solve real problems. It will also help them understand algorithmic analysis and complexities. After successful completion of this course, you should be able to:

- Understand recursive algorithms
- Implement linked lists, stacks, and queues
- Implement a binary tree
- Understand hash tables and graphs
- Understand algorithmic analysis
- Understand generics/templates
- Create a comprehensive programming project

Reading: I expect you to read the relevant material before or after the class meets. The lectures may not cover everything in the readings and will often include material not found in the readings.

Discussion Board: The fastest and easiest way to get help is by posting your questions on eLearning on the class's discussion board, not by email. You will be able to post your questions, anonymously if you wish, about anything related to the class (except grades) and get a response either from me or your classmates. Since there are multiple students who can answer questions related to course materials, you should get a quicker response allowing you to complete your task faster. If you have a question during a lecture, do not hesitate to raise your hand and ask.

Technical Requirements: In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Access and Navigation: This course can be accessed using your UT Dallas NetID account on the eLearning website. Please see the course access and navigation section of the Getting Started with eLearning webpage for more information. To become familiar with the eLearning tool, please see the Student eLearning Tutorials webpage. UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The eLearning Support Center includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Class Participation: Regular class participation is expected regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. A portion of the grade for this course is directly tied to your participation in this class. It also includes engaging in group or other activities during class that solicit your feedback on homework assignments, readings, or materials covered in the lectures (and/or labs). Successful participation is defined as consistently adhering to university requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Class Materials: The Instructor may provide class materials that will be made available to all students registered for this class as they are intended to supplement the classroom experience. These materials may be downloaded during the course; however, these materials are for registered students' use only. Classroom materials may not be reproduced or shared with those not in class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Visual Studio Code: I will be using Visual Studio Code for this class. In case you are interested in using Visual Studio Code for Java development, below are some links to get you started:

1- This link contains the Windows/MacOS installer of VS Code and required packages for Java development in one install: https://code.visualstudio.com/docs/java/java-tutorial#_coding-pack-for-java
2- VS Code user interface: https://code.visualstudio.com/docs/getstarted/userinterface
3- Keyboard Shortcuts for Windows users: https://code.visualstudio.com/shortcuts/keyboard-shortcuts-windows.pdf

Java (Required): All projects you submit will be executed with Java SE 17 or higher and will require you to write unit tests. Ensure that "*Test Runner for Java*" extension is already installed in VS Code. You may use any IDE you prefer. If you intend to use your own computer to write the class assignments, it is important that you get a compiler downloaded, installed, and running on your computer as soon as possible. If you don't have a computer, or if you're having problems getting a compiler installed, you should write your programs in the labs until the problems are resolved. In any case, please note that you are responsible for getting the programming assignments written and turned in on time. Since there are many computers available on campus, problems with your local machines will not be accepted as an excuse for not doing the assignments or for late submissions.

Help Desk: For help with issues regarding your computer, UTD maintains a walk-in help desk. Visit their Web site for details: http://www.utdallas.edu/ir/helpdesk/

Tutoring: For programming assistance visit the Mentoring Center. Using BlackBoard Collaborate, you can virtually walk into the Mentoring Center for assistance. Instructions to access the Mentoring Center online is detailed here. The hours for the Mentoring Center are available at http://csmc.utdallas.edu. If you need help, please make the effort to reach out. We can't help you if we don't know that you need help.

Resources:

- http://javabeginnerstutorial.com/core-java/
- http://stackoverflow.com/questions/tagged/java
- http://introcs.cs.princeton.edu/java/10elements/

Grading:

- **Four Projects** **40%**
- **Four Quizzes** **8%**
- **Four Labs** **20%**
- **Midterm** **15%**
- **Final** **17%**

Grading Scale:

98-100 A+	88-89 B+	78-79 C+	68-69 D+	Below 60 F
92-97 A	82-87 B	72-77 C	62-67 D	
90-91 A-	80-81 B-	70-71 C-	60-61 D	

Grade Disputes: All grade disputes must be reported within 1 week and resolved within 2 weeks of the grade in question being posted in eLearning. Uncontested grades will become final after 1 week and cannot be disputed later. Announcements are made after each grade is posted so, please check your grades promptly.

Late Submissions: Submitting projects and assignments after the due date is not acceptable. If you find yourself in this situation, you should consider managing your time more efficiently to prevent future occurrences. I expect that you will work on assignments a little at a time rather than waiting until a day or two before it is due. In case of an emergency, please reach out to let me know. I must be notified about any emergencies before the assignment due date.

Assignments Integrity: Credits given on assignments must be earned honestly and professionally. All assignments are individual work. Copying code or homework from other students, the internet, or other sources, including the use of AI tools, is considered plagiarism. All university policies will apply. Feel free to share ideas on solving the problem presented by a homework or project assignment, but DO NOT SHARE ANY CODE. When discussing logic, keep it general. If you give out every little piece of logic you have, there is a good chance the person you are helping will have very similar code as yours and may be flagged for being too similar. All projects will be submitted in eLearning and will be compared for originality. Any projects that are approximate or identical copies will be reported to the Office of Community Standards and Conduct, and I will accept their decision in regards to the grade if they believe that academic dishonesty has occurred. Not only will your project be graded on proper execution, but also things like efficiency, implementation and documentation. Keep in mind that you always want to write code that is easy to understand and is also easy to maintain. Fewer lines do not necessarily mean a better program. Please use comments liberally. You are responsible for testing your project thoroughly before submission. I will not give you all of the test cases that will be used for grading before the project is due. As a programmer, you must be able to identify all possible input and make sure that your code produces proper output and does not crash.

Tentative Course Schedule:

Week 1:

- Class Introduction
- IDE Setup
- Chapters 1-3

Week 2:

- Chapters 4-6
- Project #1 Assigned

Week 3:

- Chapters 7, 8
- Lab #1
- **Quiz #1 (Chapters 1-6)**

Week 4:

- Chapters 9, 10
- Lab #1 Due

Week 5:

- Chapter 11
- Project #2 Assigned
- Project #1 Due

Week 6:

- Chapter 12
- Lab #2
- **Quiz #2 (Chapters 7-11)**

Week 7:

- Chapter 13
- **Midterm Exam**
- Lab #2 Due

Week 8:

- Chapter 18
- Project #2 Due

Fall Break: Mar 17th - 23rd

Week 9:

- Chapter 19
- Project #3 Assigned

Week 10:

- Chapter 20, 21
- Lab #3

Week 11:

- Chapter 24
- Lab #3 Due
- **Quiz #3 (Chapters 12, 13, 18, 19, 20, 21)**

Week 12:

- Chapters 22, 23
- Project #4 Assigned
- Project #3 Due

Week 13:

- Chapter 25
- Lab #4

Week 14:

- Chapters 26, 42, 43
- Lab #4 Due
- **Quiz #4 (Chapters 22, 23, 24, 25, 26, 42, 43)**

Week 15:

- Chapters 27-29
- Project #4 Due

Week 16:

- **Final Exam**