

YILDIZ TECHNICAL UNIVERSITY

MAT 4260

DATA STRUCTURES

2023-2024 SPRING

Instructor: Assoc. Prof. Emre Kolotoğlu

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Office: E-2036

Office Hours: Monday 15:00-15:50 & Tuesday 15:00-15:50

Textbook: Robert Lafore, Data Structures & Algorithms in Java, 2nd Edition, Sams, 2003.

Course Website: <http://avesis.yildiz.edu.tr/kolot/dokumanlar>

Supplementary Websites: <http://ideone.com> — <http://repl.it/languages/java>

Course Outline:

- 1 Overview
- 2 Arrays
- 3 Simple Sorting
- 4 Stacks and Queues
- 5 Linked Lists
- 6 Recursion
- 7 Advanced Sorting
- 8 Binary Trees

Necessary Downloads:

- Go to <https://www.informit.com/store/data-structures-and-algorithms-in-java-9780672324536> and under Downloads, download the files ExamplePrograms.ZIP and WorkshopApplets.ZIP into your computer and unzip them.
- Go to <https://www.oracle.com/tr/java/technologies/javase/javase8-archive-downloads.html> and download jdk-8 that is suitable for the operating system of your computer.
- For further instructions, see Appendix A of the textbook.

Attendance: Attending at least 70% of the lectures is mandatory. Students who attend less than 70% of the lectures may receive an F0 grade.

Homework Assignments: There will be some homework assignments throughout the semester. For homework assignments and due dates, check the course website regularly. Students are allowed to form homework groups of at most 3 members and work on the homework problems together as a group. Each group must return only one homework solution with the names and student IDs of all group members written on it. Sharing homework solutions between groups is forbidden and will be considered as cheating. You can discuss solutions to homework assignments with another group in the conceptual level but you cannot share your code between groups. Each group is supposed to submit its own version of the solutions.

Exams: There will be one midterm exam and one final exam. Exam dates will be announced later.

Grading:

- Homework Assignments 20%
- Midterm Exam 40%
- Final Exam 40%

Note: The instructor has the right to make reasonable changes in this syllabus.