

# CS201: DATA STRUCTURES AND ALGORITHMS

Fall 2021/2022

SUN, TUE, THU 14:00 - 14:50

Al-Shadadiya Campus, Room #S01C1002

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<b><u>Instructor:</u></b>	Dr. Fawaz Alazemi	<b><u>T.A.:</u></b>	Sulaiman Al-Khazi
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**Objectives:** Introduction to basic analysis and data-structure techniques for efficiently representing information in a computing system along with their use in fundamental algorithms.

**Prerequisites:** CS-111 & CS-142

**Book:**

- *Data Structures and Algorithms in C++*, Adam Drozdek, ISBN-13: 978-1133608424.

**Important Dates and Grade Distribution:**

Homeworks and Quizzes .....	(20%)
1st Midterm 28/11/2021 .....	(20%)
2nd Midterm 9/1/2022 .....	(20%)
Final Exam 26/01/2022 11:00 13:00 .....	(40%)
Bonuses .....	(5%)

**Policy:**

- Attendance is **mandatory** and will effect your final grade.
- Not all the details are covered in class. It is **your job to understand** all the details from the book.
- Late Assignments:
  - **One-day** late, receive *%50* of your total grade.
  - **Two or more** days late, receive *zero* grade.
- It is your responsibility to write in clear way. *If I can't read ... I can't grade.*

**Tentative Course Outline:**

<u>Chapters</u>	<u>Topic</u>	<u>No. of Weeks</u>
2	Complexity Analysis	1
3 & 4	Lists, Stacks, & Queues	2
5	Recursion & proof by induction	1
6 & 7	Trees, Heaps, and Tries	3
8	Graphs	3
9	Sorting	2
10	Hashing	2

**Advice for you:**

- Understanding CS201 material will make CS301 material way easier.
- Do the assignments by yourself and to the best of your ability.
- Start working on assignments once they are posted. **DO NOT** work on them 24hrs before the deadline.
- Don't be afraid to ask questions.
- If you have difficulties understanding the material **Talk** to me or the TA .
- **Practice Programming.** PRACTICE PROGRAMMING. Practice Programming.
- **Read The Book.** READ THE BOOK. Read The Book.