

CS240 Notes

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1 Course Objectives

What is this course about?

- When first learning to program, we emphasize **correctness**
- Starting with this course, we will also be concerned with **efficiency**
- We will study efficient methods of **storing, accessing, and performing operations** on large collections of data.
- Typical operations include: **inserting** new data items, **deleting** data items, **searching** for specific data items, **sorting**
- We will consider various **abstract data types** (ADTs) and how to implement them efficiently using appropriate **data structures**.
- There is a strong emphasis on mathematical analysis in the course
- Algorithms are presented using pseudocode and analyzed using order notation (big-O, etc.)

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