Course Topics Overview

Data Structures
- Storage:
  - List/Sorted List
  - Stack
  - Queue
  - Binary Search Tree
  - Hash Table
  - Heap
- Structural
  - Tree
  - Graph
- Sparse Arrays

operations
- Insert()
- Find()
- Remove()
- FindMin() / FindMax()
- DeleteMin() / DeleteMax()
- traversals (sorted/complete)

traversals
- traversals, shortest paths, MSTs

storage, traversals

Algorithms
- categorization of algorithms:
  - recursive vs. iterative
  - primary vs. secondary effects
  - greedy vs. divide-and-conquer vs. other
- types of algorithms
  - searching (linear, binary, using data structures)
  - selection (using data structures, quickselect)
  - sorting (insertion, shellsort, mergesort, quicksort, bucketsort)
  - graph-based (shortest path, minimum spanning tree)