Final Exam Topics

In general, you are responsible for all of the material covered in class since the last class before the second midterm exam. This material is identified by topic below.

Queues

- Definition, application

- ADT

- Implementation using arrays and linked lists

Algorithm Efficiency and Analysis

- Analyzing the running time of algorithms

- Search algorithms: binary search, linear search

- Sorting algorithms: selection sort, insertion sort, and quicksort

- Analysis of running times of sorting and searching algorithms

Trees

- General trees: terminology and definitions, their properties, applications

- Binary trees: their properties and analysis, ADT

- Binary tree traversals

- Binary tree implementation

- Binary search trees: all algorithms supported by them and their implementation

Miscellaneous Topics

- Iterators