

Midterm Exam Review

COT5405, Fall 2017

Chapter 1 (stable-matching.ppt): 3, 9, 11, 16, 21, 23.

Chapter 2 (analysis.ppt): 4-6, 9-11, 13, 15-20

Chapter 3 (graphs.ppt): 3, 8-14, 18-24, 27-29, 31-37, 39-42, 44-46, 48-50.

Chapter 4 (greedy.ppt): 3, 6-8, 10-14, 16, 19, 24-25, 27-32.

(mst.ppt): 3, 5, 11-15, 17-20.

Huffman.ppt: 5-6, 16, 18-19

Heapsort.ppt: all slides

priority-queues.ppt: 2, 7-12

Guidelines:

- Understand the problems, the strategies that lead to the solutions and how to implement the algorithms (data representation/structures used, etc.)
- Know and can run the fundamental algorithms, such as shortest path, MST, etc.
- Able to analyze the running time of algorithms (big-O notation).
- Review all homework problems.