

Quiz 4 Topics

Allowing **3 sides** of notes

Graphs

Basics not the emphasis, except as used later:

adjacency and edge list representations

DFS, BFS and variations

active intervals in DFS leading to edge classifications:

tree, back, forward, cross

DAG's, topological order, critical path

strongly connected components

DAG meta-graph of strongly connected components

Minimum Spanning Trees

Prim's Algorithms

Heap with decrease-key

Kruskal's Algorithm

In-Trees

Cut Theorem in Notes and DasGupta

Shortest Path

Dijkstra

Bellman-Ford (DasGupta)

Transitive Closure

Warshall's Algorithm

Array representation

All-pairs Shortest Path (Floyd)

Other Greedy Problems

idea of a greedy algorithm

Huffman encoding

NOT earlier topics: Hash table, B-trees, Master Theorem, sorts, searching, recurrence