## CSE 373 Spring 2016: Final Exam Review List Two 8.5" $\times$ 11" Pages (Double-Sided) of Notes Allowed

- 1. Choose the best structure problems.
- 2. State the complexity problems.
- 3. Insertion and search problems: AVL, min-heap (normal insert and BuildHeap), B+-tree, hashing with chains, hashing with quadratic probing, up-trees (union and find).
- 4. Deletion problems: min-heap, hashing.
- 5. Graph Algorithms and Representations: topological sort, DFS, BFS, Dijkstra, minimal spaning tree (Prim and Kruskal), subgraph isomorphism (find one, prove it is one)
- 6. Sorting: selection, insertion, heap, merge, quicksort, bin sort, radix sort. Be able to do them. Know complexities.
- 7. Write a recursive function to do something related to any of the structures we have studied, especially graphs and trees.
- 8. Analyze complexity of your function or mine.