Class Introduction, Data Structures Review

5.     **Binary Trees**, non-balanced and Balanced binary trees, Rotation

6.     Introduction to Specialized Binary Trees (trie-s, n-branching trees, b-trees)

7.     **AVL Trees** and B-Trees and (B+-tree)

8.     **Red-Black Trees**

9.     **Hashing Functions, Hash Tables, and Collisions**

2.     Introduction to Graphs

3.     Searching Graphs (BFS and DFS)

4.     Shortest Path, Trees, and MST

10.  Files, Data Access

11.  Introduction to Databases

12.  Data Design, Keys, and Normal Forms

13.  Introduction to SQL

14.  Comprehensive Review for final exam

 I would do external sort and B+ trees too.

Trees are both a subset of graphs and used far more often than the generic case. There are a lot more optimizations available for the special case as well.

Learn trees first — specifically non-balanced binary trees.

After that, balanced, then trie-s, then n-branching trees, then b-trees.

After that decade of work is up, graphs would be a great next step!