CS 3233 Discrete Mathematical Structures – Fall 04

Material covered in class from 11/15/04 until 11/29/04

This is the material relevant for the final exam, IN ADDITION to the material relevant for midterm 1 AND the material relevant for midterm 2

Week	Material
13	**Graphs (Ch. 8.1, 8.2 until page 550, 8.3 until page 560)** Undirected graph, directed graph. G=(V,E). Vertices, edges. Handshaking lemma. Adjacent, incident, degree, in-degree, out-degree. Bipartite graphs. Adjacency matrix, adjacency lists, incidence matrix.
14	**Paths, Connectivity, Trees, Graph Traversal (Ch. 8.4 until page 572, 9.1 until page 277, 9.3, 9.4 until page 680)** Paths, Connectivity. Strongly connected, weakly connected in directed graphs. Trees (acyclic graphs), rooted trees. Properties of trees. Tree traversals: Preorder, inorder, postorder. Spanning trees. Depth-first search, breadth-first search.

- Use the **pictures** on the web as an additional resource.

- A good review is to look over the **Key Terms and Results** at the end of every full chapter.

- The book provides many practice questions at the end of every section, as well as additional practice questions at the end of every full chapter. The answers to the odd numbered problems are given in the end of the book.

The final exam is on Friday December 10, 1:30pm-4:15pm in the class room. It is closed-book and closed-notes, but you may bring bring one handwritten 4 inch by 6 inch card (two-sided), that you have to turn in with the exam.