See Handout 1 for course information.

Review: Defn of graph, vertex, vertices, edges, incidence function $\phi(e)$, power set $P(V)$, adjacent vertices, neighbor vertices, adjacent edges, incident vertex and edge, loop, multiple edges, parallel edges, isolated vertex, null graph $N_n$, path graph $P_n$, cycle graph $C_n$, complete graph $K_n$, bipartite graph, degree $d(v)$ or $d_G(v)$.

Reading Assignments
For January 13: Chapter 1 through Section 1.7
For January 18: Sections 1.8, 1.9, 2.1, and 2.2
For January 20: Sections 2.3 through 2.5
For January 25: Sections 2.6, 2.7, and 3.1

Homework Assignments
HW#1.
due Thurs, 1/20/2011: Chapter 1, exercises 5, 8, 10, 14, 21(*), and 22.
Graduate/bonus exercises 6, 20, and 33.
(*) For Exercise 21, do for all $n \geq 1$.

HW#2.
due Tues, 1/25/2011: Chapter 2, exercises 1, 4, 6, 7(*), 11.
Graduate/bonus exercises 3(*), 9(*).

Notes.
For #3, $G$ is to be simple.
For #7, $G$ and $G'$ are to be simple.
For #9, maximality is with respect to the subgraph relation. That is,

$K$ is a maximal connected subgraph of $G$ iff
1) $K$ is a subgraph of $G$;
2) $K$ is connected;
3) there is no subgraph $H$ of $G$ which is connected and properly contains $K$ as a subgraph.