Reading: Sections 1.1-1.3, 2.1-2.6, 2.8, 7.1.

Skills: 
1) Determine if a given function is a solution to a particular differential equation.
2) Use basic mathematical modeling with first order differential equations.
3) Find all solutions of a separable differential equation.
4) Find the general solution to a linear first order differential equation.
5) Find all solutions of an exact differential equation, find an integrating factor when necessary.
6) Apply the theorems for existence and uniqueness of solutions to differential equations.
7) Use the method of successive approximations to solve a simple first order differential equation.
8) Model the growth or decay of populations using autonomous differential equations.
9) Know basic matrix operations.
10) Solve linear systems of algebraic equations.

Practice: See http://www.math.cmu.edu/~gheorghi/prac260.html. Midterm 1 practice Quiz (ungraded) is available on WileyPlus.