Math 225, Fall 2011, Tentative Schedule:

Date	Section/Topic
W 8/31/11	First Day Handout; §1.1 – Basic Definitions and Concepts §1.2 – Solutions and Initial Value Problems
W 9/7/11	§1.2 – Solutions and Initial Value Problems §2.7 – Direction Fields
M 9/12/11	Phase Line §2.7 – Approximation Method of Euler
W 9/14/11	§2.7 – Approximation Method of Euler §2.2 – Separable Equations
M 9/19/11	§2.1 – First-Order Linear Equations §2.4 – Compartmental Analysis
W 9/21/11	§2.4 – Compartmental Analysis
M 9/26/11	Improved Euler's Method §2.8 – Higher-Order Taylor Series Methods
W 9/28/11	§3.9–3.11 – Introduction: the Mass-Spring Oscillator §3.1 – Introduction to Second-Order Linear Equations
M 10/3/11	**EXAM 1**
W 10/5/11	§3.2 – Fundamental Solutions of the Homogeneous Equation
M 10/10/11	§3.2 – Fundamental Solutions of the Homogeneous Equation
W 10/12/11	§3.4 – Homogeneous Equations with Constant Coefficients: Real Roots
M 10/17/11	§3.5 – Homogeneous Equations with Constant Coefficients: Complex Roots
W 10/19/11	§3.6 – Nonhomogeneous Equations

Date	Section/Topic
M 10/24/11	§3.7 – Superposition and the Method of Undetermined Coefficients
W 10/26/11	§3.8 – Variation of Parameters
M 10/31/11	§8.1 – Introduction to the Phase Plane
W 11/2/11	§8.1 – Introduction to the Phase Plane Coupled Mass-Spring Systems
M 11/7/11	**EXAM 2**
W 11/9/11	§5.1 – Definition of Laplace Transform
M 11/14/11	§5.1 – Definition of Laplace Transform §5.2 – Properties of the Laplace Transform
W 11/16/11	§5.3 – Inverse Laplace Transform
M 11/21/11	§5.3 – Inverse Laplace Transform §5.4 – Solving Initial Value Problems
W 11/23/11	§5.5–5.6 – Transforms of Discontinuous and Periodic Functions
M 11/28/11	§6.2 – Review of Matrices and Vectors
W 11/30/11	§6.3–6.4 – Homogeneous Linear Systems with Real Eigenvalues
M 12/5/11	Linear Systems in the Plane
W 12/7/11	Connections Between Eigenvalues and Guess and Test Method
M 12/12/11	Review for Final Exam
F 12/16/11	**FINAL EXAM**