Math 225, Fall 2006, Tentative Schedule:

Date	Section/Topic
Th 8/31/06	First Day Handout; §1.1 – Background §1.2 – Solutions and Initial Value Problems
Tu 9/5/06	§1.2 – Solutions and Initial Value Problems §1.3 – Direction Fields
Th 9/7/06	§Project D – Phase Line §1.4 – Approximation Method of Euler
Tu 9/12/06	§1.4 – Approximation Method of Euler §2.2 – Separable Equations
Th 9/14/06	§2.3 – Linear Equations §3.2 – Compartmental Analysis
Tu 9/19/06	§3.2 – Compartmental Analysis
Th 9/21/06	§3.6 – Improved Euler's Method §3.7 – Higher-Order Numerical Methods: Taylor and Runge-Kutta
Tu 9/26/06	§3.7 – Higher-Order Numerical Methods: Taylor and Runge-Kutta Review for Exam 1
Th 9/28/06	**EXAM 1**
Tu 10/3/06	§4.1 – Introduction: the Mass-Spring Oscillator §4.2 – Homogeneous Linear Equations: The General Solution
Th 10/5/06	§4.2 – Homogeneous Linear Equations: The General Solution
Tu 10/10/06	§4.2 – Homogeneous Linear Equations: The General Solution §4.3 – Auxiliary Equations with Complex Roots
Th 10/12/06	§4.4 – Nonhomogeneous Equations: Method of Undetermined Coefficients

Date	Section/Topic
Tu 10/17/06	§4.5 – Superposition and Undetermined Coefficients §4.6 – Variation of Parameters
Th 10/19/06	§4.6 – Variation of Parameters
Tu 10/24/06	§5.4 – Introduction to the Phase Plane
Th 10/26/06	§5.4 – Introduction to the Phase Plane §5.5 – Coupled Mass-Spring Systems
Tu 10/31/06	**EXAM 2**
Th 11/2/06	§7.2 – Definition of Laplace Transform
Tu 11/7/06	§7.2 – Definition of Laplace Transform §7.3 – Properties of the Laplace Transform
Th 11/9/06	§7.4 – Inverse Laplace Transform
Tu 11/14/06	§7.4 – Inverse Laplace Transform §7.5 – Solving Initial Value Problems
Th 11/16/06	§7.6 – Transforms of Discontinuous and Periodic Functions
Tu 11/21/06	**STUDENT PRESENTATIONS**
Th 11/23/06	**THANKSGIVING BREAK**
Tu 11/28/06	§9.3 – Review of Matrices and Vectors
Th 11/30/06	§9.5 – Homogeneous Linear Systems with Constant Coefficients
Tu 12/5/06	Linear Systems in the Plane
Th 12/7/06	Connections Between Eigenvalues and Guess and Test Method
Tu 12/12/06	Review for Final Exam
Tu 12/19/06	**FINAL EXAM**