

**Math 225, Fall 2004, Tentative Schedule:**

Date	Section/Topic
W 9/1/04	First Day Handout; §1.1 – Background
F 9/3/04	§1.2 – Solutions and Initial Value Problems
M 9/6/04	§1.3 – Direction Fields
W 9/8/04	§Project D – Phase Line
F 9/10/04	§1.4 – Approximation Method of Euler
M 9/13/04	§2.2 – Separable Equations
W 9/15/04	§2.3 – Linear Equations
F 9/17/04	Review for Exam 1
M 9/20/04	§3.2 – Compartmental Analysis
W 9/22/04	<b>EXAM 1</b>
F 9/24/04	§3.2 – Compartmental Analysis
M 9/27/04	§3.6 – Improved Euler's Method
W 9/29/04	§3.7 – Higher-Order Numerical Methods: Taylor and Runge-Kutta
F 10/1/04	§4.1 – Introduction: the Mass-Spring Oscillator
M 10/4/04	§4.2 – Homogeneous Linear Equations: The General Solution
W 10/6/04	§4.2 – Homogeneous Linear Equations: The General Solution
F 10/8/04	§4.2 – Homogeneous Linear Equations: The General Solution
M 10/11/04	§4.3 – Auxiliary Equations with Complex Roots

Date	Section/Topic
W 10/13/04	§4.4 – Nonhomogeneous Equations: Method of Undetermined Coefficients
F 10/15/04	§4.5 – Superposition and Undetermined Coefficients
M 10/18/04	§4.6 – Variation of Parameters
W 10/20/04	Review for Exam 2
F 10/22/04	<b>EXAM 2</b>
M 10/25/04	§5.4 – Introduction to the Phase Plane
W 10/27/04	§5.4 – Introduction to the Phase Plane
F 10/29/04	§5.5 – Coupled Mass-Spring Systems
M 11/1/04	§7.2 – Definition of Laplace Transform
W 11/3/04	§7.2 – Definition of Laplace Transform
F 11/5/04	§7.3 – Properties of the Laplace Transform
M 11/8/04	§7.4 – Inverse Laplace Transform
W 11/10/04	§7.4 – Inverse Laplace Transform
F 11/12/04	§7.5 – Solving Initial Value Problems
M 11/15/04	<b>STUDENT PRESENTATIONS</b>
W 11/17/04	<b>STUDENT PRESENTATIONS</b>
F 11/19/04	<b>EXAM 3</b>
M 11/22/04	§7.6 – Transforms of Discontinuous and Periodic Functions
W 11/24/04	§7.6 – Transforms of Discontinuous and Periodic Functions
F 11/26/04	THANKSGIVING BREAK

Date	Section/Topic
M 11/29/04	§9.3 – Review of Matrices and Vectors
W 12/1/04	§9.5 – Homogeneous Linear Systems with Constant Coefficients
F 12/3/04	§9.5 – Homogeneous Linear Systems with Constant Coefficients
M 12/6/04	Linear Systems in the Plane
W 12/8/04	Linear Systems in the Plane
F 12/10/04	Connections Between Eigenvalues and Guess and Test Method
M 12/13/04	Review for Final Exam
F 12/17/04	<b>FINAL EXAM</b>