

Math 225, Fall 2007, Tentative Schedule:

| Date | Section/Topic |
|------------|---|
| W 8/29/07 | First Day Handout; §1.1 – Background |
| F 8/31/07 | §1.2 – Solutions and Initial Value Problems |
| M 9/3/07 | Labor Day |
| W 9/5/07 | §1.3 – Direction Fields |
| F 9/7/07 | §Project D – Phase Line |
| M 9/10/07 | §1.4 – Approximation Method of Euler |
| W 9/12/07 | §2.2 – Separable Equations |
| F 9/14/07 | §2.3 – Linear Equations |
| M 9/17/07 | §3.2 – Compartmental Analysis |
| W 9/19/07 | §3.2 – Compartmental Analysis |
| F 9/21/07 | Review for Exam 1 |
| M 9/24/07 | EXAM 1 |
| W 9/26/07 | §3.6 – Improved Euler's Method |
| F 9/28/07 | §3.7 – Higher-Order Numerical Methods: Taylor and Runge-Kutta |
| M 10/1/07 | §4.1 – Introduction: the Mass-Spring Oscillator |
| W 10/3/07 | §4.2 – Homogeneous Linear Equations: The General Solution |
| F 10/5/07 | §4.2 – Homogeneous Linear Equations: The General Solution |
| M 10/8/07 | §4.2 – Homogeneous Linear Equations: The General Solution |
| W 10/10/07 | §4.3 – Auxiliary Equations with Complex Roots |

| Date | Section/Topic |
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| F 10/12/07 | §4.4 – Nonhomogeneous Equations: Method of Undetermined Coefficients |
| M 10/15/07 | §4.5 – Superposition and Undetermined Coefficients |
| W 10/17/07 | §4.6 – Variation of Parameters |
| F 10/19/07 | §5.4 – Introduction to the Phase Plane |
| M 10/22/07 | §5.5 – Coupled Mass-Spring Systems |
| W 10/24/07 | §7.2 – Definition of Laplace Transform |
| F 10/26/07 | §7.2 – Definition of Laplace Transform |
| M 10/29/07 | §7.3 – Properties of the Laplace Transform |
| W 10/31/07 | Review for Exam 2 |
| F 11/2/07 | EXAM 2 |
| M 11/5/07 | §7.4 – Inverse Laplace Transform |
| W 11/7/07 | §7.4 – Inverse Laplace Transform |
| F 11/9/07 | §7.5 – Solving Initial Value Problems |
| M 11/12/07 | §7.6 – Transforms of Discontinuous and Periodic Functions |
| W 11/14/07 | STUDENT PRESENTATIONS |
| F 11/16/07 | STUDENT PRESENTATIONS |
| M 11/19/07 | STUDENT PRESENTATIONS |
| W 11/21/07 | No Class |
| F 11/23/07 | Thanksgiving Break |

| Date | Section/Topic |
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| M 11/26/07 | §9.1 – Matrix Methods for Linear Systems Introduction |
| W 11/28/07 | §9.3 – Review of Matrices and Vectors |
| F 11/30/07 | §9.5 – Homogeneous Linear Systems with Constant Coefficients |
| M 12/3/07 | §9.5 – Homogeneous Linear Systems with Constant Coefficients |
| W 12/5/07 | Linear Systems in the Plane |
| F 12/7/07 | Connections Between Eigenvalues and Guess and Test Method |
| M 12/10/07 | Review for Final Exam |
| W 12/19/07 | FINAL EXAM |