Math 441, Fall 2008, Tentative Schedule:

Date	Section/Topic
W 8/27/08	First Day Handout; §1.1 – Basic Concepts and Taylor's Theorem
M 9/1/08	Labor Day
W 9/3/08	§2.1 – Representation of Numbers in Different Bases
M 9/8/08	§2.1 – Floating-Point Numbers and Roundoff Errors
W 9/10/08	§2.2 – Absolute and Relative Errors: Loss of Significance
M 9/15/08	§3.1 – Bisection Method
W 9/17/08	§3.2 – Newton's Method
M 9/22/08	§3.2 – Newton's Method for Nonlinear Systems
W 9/24/08	§3.4 – Fixed Points and Functional Iteration
M 9/29/08	**EXAM 1**
W 10/1/08	§4.2 – LU and Cholesky Factorizations
M 10/6/08	§4.3 – Pivoting and Constructing an Algorithm (Gaussian Elimination)
W 10/8/08	§4.6 – Solution of Equations by Iterative Methods
M 10/13/08	§6.1 – Polynomial Interpolation
W 10/15/08	§6.2 – Divided Differences
M 10/20/08	§6.4 – Spline Interpolation
W 10/22/08	§6.8 – Best Approximation: Least-Squares Theory
M 10/27/08	§6.12 – Trigonometric Interpolation
W 10/29/08	**EXAM 2**

Date	Section/Topic
M 11/3/08	§6.13 – Fast Fourier Transform
W 11/5/08	§6.13 – Fast Fourier Transform
M 11/10/08	§7.1 –Numerical Differentiation and Richardson Extrapolation
W 11/12/08	§7.2 – Numerical Integration Based on Interpolation
M 11/17/08	§7.3 – Gaussian Quadrature
W 11/19/08	§7.5 – Adaptive Quadrature
M 11/24/08	§8.2 – Taylor-Series Methods
W 11/26/06	§8.3 – Runge-Kutta Methods
M 12/1/08	§8.4 – Multistep Methods
W 12/3/08	§8.4 – Multistep Methods
M 12/8/08	Review for Final Exam
W 12/17/08	**FINAL EXAM**