Math 620, Fall 2010, Tentative Schedule:

Date	Section/Topic
W 9/1/10	First Day Handout; §1.1 – Basic Concepts and Taylor's Theorem
M 9/6/10	Labor Day Holiday
W 9/8/10	§2.1 – Floating-Point Numbers and Roundoff Errors
M 9/13/10	§2.2 – Absolute and Relative Errors: Loss of Significance
W 9/15/10	§2.3 – Stable and Unstable Computations: Conditioning
M 9/20/10	§3.1 – Bisection Method
W 9/22/10	§3.2 – Newton's Method
M 9/27/10	§3.2 – Newton's Method for Nonlinear Systems
W 9/29/10	§3.4 – Fixed Points and Functional Iteration
M 10/4/10	§3.6 – Homotopy and Continuation Methods
W 10/6/10	§6.1 – Polynomial Interpolation
M 10/11/10	§6.2 – Divided Differences
W 10/13/10	§6.1 – Chebyshev Polynomials
M 10/18/10	**MIDTERM EXAM**
W 10/20/10	§6.4 – Spline Interpolation
M 10/25/10	§6.8 – Best Approximation: Least-Squares Theory
W 10/27/10	§6.12 – Trigonometric Interpolation
M 11/1/10	§6.13 – Fast Fourier Transform

Date	Section/Topic
W 11/3/10	§6.13 – Fast Fourier Transform
M 11/8/10	§7.1 –Numerical Differentiation and Richardson Extrapolation
W 11/10/10	§7.2 – Numerical Integration Based on Interpolation
M 11/15/10	§7.3 – Gaussian Quadrature
W 11/17/10	§7.5 – Adaptive Quadrature
M 11/22/10	§8.2 – Taylor-Series Methods
W 11/24/10	**THANKSGIVING BREAK (university open, but class cancelled)**
M 11/29/10	§8.3 – Runge-Kutta Methods
W 12/1/10	§8.4 – Multistep Methods
M 12/6/10	§8.4 – Multistep Methods
W 12/8/10	§8.5 – Local and Global Errors: Stability
M 12/13/10	§Review for Final Exam
M 12/20/10	**FINAL EXAM**