Math 6313, Fall 2015, Tentative Schedule:

Date	Section/Topic
M 8/24/15	First Day Handout; §1.1 – Basic Concepts and Taylor's Theorem
W 8/26/15	§2.1 – Representation of Numbers in Different Bases
M 8/31/15	§2.1 – Floating-Point Numbers and Roundoff Errors
W 9/2/15	§2.2 – Absolute and Relative Errors: Loss of Significance
M 9/7/15	**Labor Day Holiday**
W 9/9/15	§2.2 – Absolute and Relative Errors: Loss of Significance
M 9/14/15	§3.1 – Bisection Method
W 9/16/15	§3.2 – Newton's Method
M 9/21/15	§3.2 – Newton's Method for Nonlinear Systems
W 9/23/15	§3.4 – Fixed Points and Functional Iteration
M 9/28/15	§6.1 – Polynomial Interpolation
W 9/30/15	§6.2 – Divided Differences
M 10/5/15	§6.1 – Chebyshev Polynomials
W 10/7/15	§6.4 – Spline Interpolation
M 10/12/15	§6.8 – Best Approximation: Least-Squares Theory
W 10/14/15	§6.12 – Trigonometric Interpolation
M 10/19/15	**Midterm Exam**

Date	Section/Topic
W 10/21/15	§6.13 – Fast Fourier Transform
M 10/26/15	§6.13 – Fast Fourier Transform
W 10/28/15	§7.1 –Numerical Differentiation and Richardson Extrapolation
M 11/2/15	§7.2 – Numerical Integration Based on Interpolation
W 11/4/15	§7.3 – Gaussian Quadrature
M 11/9/15	§7.3 – Gaussian Quadrature
W 11/11/15	§7.5 – Adaptive Quadrature
M 11/16/15	§8.2 – Taylor-Series Methods
W 11/18/15	§8.3 – Runge-Kutta Methods
M 11/23/15	**Fall Break**
W 11/25/15	**Fall Break**
M 11/30/15	§8.4 – Multistep Methods
W 12/2/15	§8.4 – Multistep Methods
M 12/7/11	§8.5 – Local and Global Errors: Stability
W 12/9/15	Review for Final Exam
TBD	**FINAL EXAM**