Math 6313, Fall 2017, Tentative Schedule:

Date	Section/Topic
M 8/21/17	First Day Handout; §1.1 – Basic Concepts and Taylor's Theorem
W 8/23/17	§2.1 – Representation of Numbers in Different Bases
M 8/28/17	§2.1 – Floating-Point Numbers and Roundoff Errors
W 8/30/17	§2.2 – Absolute and Relative Errors: Loss of Significance
M 9/4/17	Labor Day
W 9/6/17	§2.2 – Absolute and Relative Errors: Loss of Significance
M 9/11/17	§3.1 – Bisection Method
W 9/13/17	§3.2 – Newton's Method
M 9/18/17	§3.2 – Newton's Method for Nonlinear Systems
W 9/20/17	§3.4 – Fixed Points and Functional Iteration
M 9/25/17	§6.1 – Polynomial Interpolation
W 9/27/17	§6.2 – Divided Differences
M 10/2/17	§6.1 – Chebyshev Polynomials
W 10/4/17	§6.4 – Spline Interpolation
M 10/9/17	§6.8 – Best Approximation: Least-Squares Theory
W 10/11/17	§6.12 – Trigonometric Interpolation
M 10/16/17	**Midterm Exam**

Date	Section/Topic
W 10/18/17	§6.13 – Fast Fourier Transform
M 10/23/17	§6.13 – Fast Fourier Transform
W 10/25/17	§7.1 –Numerical Differentiation and Richardson Extrapolation
M 10/30/17	§7.2 – Numerical Integration Based on Interpolation
W 11/1/17	§7.3 – Gaussian Quadrature
M 11/6/17	§7.3 – Gaussian Quadrature
W 11/8/17	§7.5 – Adaptive Quadrature
M 11/13/17	§8.2 – Taylor-Series Methods
W 11/15/17	§8.3 – Runge-Kutta Methods
M 11/20/17	**Fall Break**
W 11/22/17	**Fall Break**
M 11/27/17	§8.4 – Multistep Methods
W 11/29/17	§8.4 – Multistep Methods
M 12/4/17	§8.5 – Local and Global Errors: Stability
W 12/6/17	Review for Final Exam
TBD	**FINAL EXAM**