

# Math/CS 4334, Fall 2013, Tentative Schedule:

Date	Section/Topic
M 8/26/13	First Day Handout; §1.0 – Preliminary Remarks §1.2 – Review of Taylor Series
W 8/28/13	§1.2 – Review of Taylor Series §1.3 – Representation of Numbers in Different Bases
M 9/2/13	<b>Labor Day Holiday</b>
W 9/4/13	MATLAB Demo
M 9/9/13	§1.3 – Floating Point Representation
W 9/11/13	§1.4 – Loss of Significance
M 9/16/13	§3.1 – Bisection Method
W 9/18/13	§3.2 – Newton's Method
M 9/23/13	§3.3 – Secant Method
W 9/25/13	§4.1 – Polynomial Interpolation
M 9/30/13	§4.1 – Polynomial Interpolation
W 10/2/13	§4.2 – Errors in Polynomial Interpolation
M 10/7/13	§4.2 – Errors in Polynomial Interpolation
W 10/9/13	§5.1 – Trapezoid Rule
M 10/14/13	§5.3 – An Adaptive Simpson's Scheme
W 10/16/13	<b>Midterm Exam §1.0 – 5.3</b>
M 10/21/13	§5.4 – Gaussian Quadrature Formulas

Date	Section/Topic
W 10/23/13	§5.4 – Gaussian Quadrature Formulas
M 10/28/13	§2.1 – Naive Gaussian Elimination
W 10/30/13	§2.2 – Gaussian Elimination with Scaled Partial Pivoting
M 11/4/13	§2.3 – Tridiagonal and Banded Systems
W 11/6/13	§8.1 – $LU$ Factorization
M 11/11/13	§8.4 – Iterative Solution of Linear Equations
W 11/13/13	§8.2 – Singular Value Decomposition (SVD)
M 11/18/13	§6.2 – Natural Cubic Splines
W 11/20/13	§6.2 – Natural Cubic Splines
M 11/25/13	<b>Fall Break</b>
W 11/27/13	<b>Fall Break</b>
M 12/2/13	§7.1 – Taylor Series Methods
W 12/4/13	§7.2 – Runge-Kutta Methods
M 12/9/13	§9.1 – Method of Least Squares
W 12/11/13	Review for Final Exam
TBD	<b>Final Exam</b>