| Date | Section/Topic |
|--------------|--|
| W $9/1/04$ | First Day Handout; §1.1 – Basic Concepts and Taylor's Theorem |
| W $9/8/04$ | $\S 2.1$ – Floating-Point Numbers and Roundoff Errors |
| M $9/13/04$ | $\S 2.2$ – Absolute and Relative Errors: Loss of Significance |
| W $9/15/04$ | $\S 2.3$ – Stable and Unstable Computations: Conditioning |
| M $9/20/04$ | $\S 2.3$ – Stable and Unstable Computations: Conditioning |
| W $9/22/04$ | 3.1 - Bisection Method |
| M $9/27/04$ | 3.2 - Newton's Method |
| W $9/29/04$ | $\S3.2$ – Newton's Method for Nonlinear Systems |
| M $10/4/04$ | $\S3.4$ – Fixed Points and Functional Iteration |
| W $10/6/04$ | 3.6 – Homotopy and Continuation Methods |
| M $10/11/04$ | 6.1 - Polynomial Interpolation |
| W $10/13/04$ | 6.2 - Divided Differences |
| M $10/18/04$ | 6.1 - Chebyshev Polynomials |
| W $10/20/04$ | MIDTERM EXAM |
| M $10/25/04$ | 6.8 - Best Approximation: Least-Squares Theory |
| W $10/27/04$ | 6.12 - Trigonometric Interpolation |
| M 11/1/04 | §6.13 – Fast Fourier Transform |

Math 441, Fall 2004, Tentative Schedule:

| Date | Section/Topic |
|--------------|---|
| W $11/3/04$ | 6.13 - Fast Fourier Transform |
| M $11/8/04$ | $\S7.1$ –Numerical Differentiation and Richardson Extrapolation |
| W $11/10/04$ | §7.2 – Numerical Integration Based on Interpolation |
| M $11/15/04$ | §7.3 – Gaussian Quadrature |
| W $11/17/04$ | §7.5 – Adaptive Quadrature |
| M $11/22/04$ | 8.2 - Taylor-Series Methods |
| W $11/24/04$ | THANKSGIVING BREAK |
| M $11/29/04$ | 8.3 - Runge-Kutta Methods |
| W $12/1/04$ | 8.4 - Multistep Methods |
| M $12/6/04$ | 8.4 - Multistep Methods |
| W $12/8/04$ | $\S8.5$ – Local and Global Errors: Stability |
| M $12/13/04$ | §Review for Final Exam |
| F $12/17/04$ | FINAL EXAM |
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