

# Suggested Topics for Final Presentation

MTHBD/CMPBD 424

- Topics In The Text

1. Aitken Acceleration of a convergent sequence.
2. Cubic Splines (I will cover this if no one picks it)
3. B-splines
4. Bezier Curves
5. Adams-Bashforth-Moulton Methods (Multi-step Methods)
6. Hyperbolic PDE's
7. Elliptic PDE's
8. Monte Carlo Methods and Simulations
9. Chebyshev Polynomials
10. Polynomial Regression
11. Optimization one-variable search and quadratic approximation
12. Optimization two-variable gradient methods.
13. Linear Programming

- Topics Not In The Text

1. Fourier Series and the Fast Fourier Transform
2. Finite Element Method
3. Surface interpolation and approximations.