M 383E/ CS 383C/ CAM 383C

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Prerequisites: 1. Fundamentals of Numerical Methods

2. Linear Algebra

3. Introductory Analysis

Assignments: Approximately seven

Examinations: Take-home Mid-term and Take-home Final

Grading: 20% Assignments

35% Mid-Term Examination 45% Final Examination

Topics: 1. Floating Point Numbers and Arithmetic

2. Basic Linear Algebra Subprograms

3. Direct Solution of Linear Systems

4. Norms and Conditioning

5. Iterative Solution of Linear Systems6. Symmetric Eigenvalue Problems

7. Nonlinear Equations