198:323 Numerical Analysis and Computing, Fall 2019

Sections: 1 M, W 6:40-8, ENG-B120; Th5:15-6:10, LSH-B267
2 M, W 6:40-8, ENG-B120; Th76:55-7:50, SEC-202

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- Office Hours: Th 2:00-3:00PM
- Course Homepage: http://www.cs.rutgers.edu/~steiger/CS323-F19.html

- Objectives: Introduction to general issues arising in numerical computing (accuracy, convergence, stability, efficiency) and to specific algorithms for some important computational tasks.

- Expected Work: several written homeworks and possibly some small programming tasks, (≤ 1/3); midterm, and a final (≥ 2/3). (* Any high level language known to the TA is OK and facility with MATLAB would be useful.)

- Topics:
  1. k-digit normalized floating point numbers
  2. Solution of Nonlinear Equations
  3. Linear Systems
  4. Polynomial Approximation and Interpolation
  5. Numerical Differentiation and Integration
  6. (?) Differential Equations
  7. (?) Monte Carlo

- References: (on reserve at SERC reference desk)

[NO RECITATION FIRST WEEK]