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;  Th6:55-7:50,  SEC-202

Instructor:  W. Steiger  Hill 417  X7293  steiger@cs.rutgers.edu
TAS:  Mohamed Abdelatif  Hill 443  (732)319-3533  latif.mohamed@rutgers.edu
      Carlos Muniz  Hill 410  cmm609@crutgers.edu

- Office Hours: Th 2:00-3:00PM or by arrangement
- 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 (3,4,5) written homeworks and possibly some small programming tasks, ($\leq 1/3$); midterm, and a final ($\geq 2/3$). (* 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]