198:323 Numerical Analysis and Computing, Spring 2004

Sections:  7  T, Th 8,  SC-135;  T7*, MU-115
          8  T, Th 8,  SC-135; Th7*, SC-206
          9  T, Th 8,  SC-135; Th9*, SC-102

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      Alex Strehl  Hill 429  X6993  strehl@paul.rutgers.edu  (teaches section 9)

•  Office Hours:  T,Th 5:00-6:00

•  Course Homepage: http://www.cs.rutgers.edu/~steiger/323.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:  Weekly written homework and computer* tasks (≤ 1/4); midterm, and a final (≥ 3/4).  (* Any high level language known to the TA is OK and facility with MATLAB is encouraged.)

•  Topics:
  1. k-digit normalized floating point numbers
  2. 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]