Numerical Linear Algebra
MA 660-1F, Spring 2013

Instructor: Dr. Y. Zeng, CH 496A, 934-2154

Time & Location: MWF 13:25 - 14:15, CH458

Office Hours: Tuesday, Thursday 11:00AM–12:00PM (or by appointment)


Syllabus: Adjoint and self-adjoint matrices; Bilinear forms and positive definite matrices; Cholesky factorization; machine arithmetic; sensitivity and stability; over-determined linear systems; Schur decomposition and Singular value decomposition; eigenvalues and eigenvectors – sensitivity and computation.

Course policies:

• Your course average is determined according to the following:
  Homework assignments 40 %
  Midterm exam (Wednesday, March 6, tentative) 20 %
  Final exam (Friday, May 10, 10:45 AM 1:15 PM) 40 %

• Homework will be assigned weekly on Wednesday and due the following Wednesday, unless announced otherwise. Software package MATLAB will be used in some assignments. Only half credit is awarded for late homework.

• You need to turn in hard copies of all assignments unless permitted. If you type your assignments, you still need to include all mathematical details.

• Midterm and Final exams will be comprehensive.