

Numerical Linear Algebra

MA 660-1F, Spring 2014

Class meets Mondays, Wednesdays, Fridays 1:25pm-2:15pm. The official class room for the course is EB 127, but we may move the class to our seminar room, CH 458.

Instructor: Dr. Nikolai Chernov

Office: 492 A Campbell Hall, ph. 934-2154 or 934-8613

Office hours: Mondays and Wednesdays 2:30-3:30 PM, walk-ins are welcome

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Lecture notes: posted (in PDF) on the instructor's web page:

[http : //people.cas.uab.edu/~mosya/teaching/teach.html](http://people.cas.uab.edu/~mosya/teaching/teach.html)

Book: *Numerical Linear Algebra*, by L. Trefethen and D. Bau, III (SIAM, 1997). It is not mandatory, but highly recommended. The book is good explaining the class material, and it contains the description of all computer projects.

Grading policy:

Weekly homework assignments	30 %
Computer projects	10 %
Midterm exam (late February, tentative)	30 %
Final exam (late April, tentative)	30 %

Homework assignments: Homework problems are listed at the end of every chapter in the class notes. Once a chapter is finished in class, you should start working on the corresponding problems. Turn them in within a week to get full credit. Late homework will receive partial credit, with small decrements for each week past the due date. It is important to do homework (even if late), as some problems constitute part of the proofs of major theorems.

Computer projects: The list of projects is posted on the instructor's web page. More detailed instructions are given in the book. The projects must be done in MATLAB. You can install MATLAB on your personal computers (I believe UAB has the licence for that). Or you can do the projects on the departmental computers or in the MLL. Projects must be submitted in a "presentable" form. Include a print-out of the MATLAB code, printed computer output (with clear readable graphs or figures if necessary), and a one-page report (hand-written or printed) with your conclusions. Projects can be resubmitted until you get full credit. The deadline for the last resubmission is the final exam.

Past JPE problems are posted at

[https : //secure.cas.uab.edu/mathshare/files/jpe.html](https://secure.cas.uab.edu/mathshare/files/jpe.html)

You can use them for practice. We may organize extra meetings for interested students to work out selected past JPE problems.

Welcome to MA 660 and best of luck to you all.