Math 110: Linear Algebra

Spring '15   TuTh 12:40–2 pm, 2050 VLSB

Instructor: Edward Frenkel

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Prerequisites: Math 54

Textbook: "Linear Algebra" by S.H. Friedberg, A.L. Insel and L.E. Spence, Fourth Edition.

Also recommended (but not necessary): "Introductory Linear Algebra with Applications", by B. Kolman.

Math 110 covers linear algebra beyond the level of Math 54, and studies some of its applications. The course is taught from an abstract point of view and is more theoretical than calculus courses. Along the way, students will learn to read, understand, and write proofs. The course will start with a review of the linear algebra covered in Math 54, with the emphasis on the necessary theoretical background. Next, we will continue with more advanced topics, such as dual spaces, diagonalization, and inner product spaces. Various applications will be considered.

Homework: Homework assignments will be given every week and posted on the web. Homework will be collected in the sections the following week and select problems will be graded. Late homework will not be accepted.

Exams: There will be one in-class **midterm exam on Thursday, March 5, 12:40–2 pm.**

The final exam will be on Thursday, May 14, 3–6 pm (exam group 15).

There will be no make-up exams. It is your responsibility to make sure that you have no exam scheduling conflicts!

Some of the problems for the exams may be taken from the homework, so it is in your interest to do homework on a regular basis.

Grades will be computed as follows: 20% homework, 30% midterm exam and 50% final exam.

If you miss the midterm exam due to a *documented* illness or emergency, the formula for the grade will be adjusted as follows: 30% homework, 70% final exam.

If you miss the final exam, you will automatically fail the course.

According to the official University policy, an "incomplete" grade can be given only for valid medical excuses with a doctor's certificate and only if the student has a passing grade (a C or better). Therefore, if you are behind in the course, an "incomplete" is not an option.