Math 110: Linear Algebra

Fall 2019

MW 5–6:30 pm, 155 Dwinelle

Instructor: Edward Frenkel

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Prerequisites: Math 54

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

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 as well. The plan is to cover Chapters 1 and 2, and Sections 5.1–5.3, 6.1–6.4, and 7.1–7.2 from the book.

Homework: Homework assignments will be posted on the class webpage every Thursday; solutions to select problems – the following Monday.

Quizzes: There will be a quiz in sections every Friday based on the material (and HW) of the preceding week. Two worst quiz scores of every student will be dropped. No make-up quizzes.

Exams: There will be one in-class midterm exam on Wednesday, Oct 16, 5:10–6:30 pm.

The final exam will be on Friday, Dec 20, 3–6 pm (exam group 19).

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's in your best interest to do homework on a regular basis. It is also advised to read ahead. Reading assignments (from the book) will be given one week in advance.

Grades will be computed as follows: 20% quizzes, 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% quizzes, 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.