

MATH 419: LINEAR SPACES AND MATRIX THEORY. FALL 2015

General information:

Class: **Section 1:** TTh 8:30–10:00 in 1024 FXB; **Section 2:** TTh 12:00–1:30 in 1311 EECS

Instructor: Michael Zieve (e-mail: zieve@umich.edu)

Office hours: TTh 10:00–10:45 in 1024 FXB or 1133 FXB; M 5:00–6:30 in 3835 East Hall.

Textbook: Otto Bretscher, *Linear Algebra with Applications*, 5th edition.

Website: <http://www.math.lsa.umich.edu/~zieve/math419.html>

Course description: This course is an introduction to linear algebra and the theory of matrices and linear spaces, with a view toward applications in science and engineering. Concepts, calculations, and the ability to apply principles to solve problems are emphasized over proofs, but arguments are rigorous. This course should be very useful for students in applied mathematics, and in all areas of science and engineering.

Prerequisite: Four mathematics courses beyond Math 110.

Grading:

- Homework (30%).
- Midterm exam (30%). Oct 27 in the usual classroom and class time.
- Final exam (40%). **Section 1:** 8:00–10:00 Dec 22 in 1024 FXB; **Section 2:** 1:30–3:30 Dec 22 in 1311 EECS.

If your cumulative grade is at least 90% of the total possible, you are guaranteed to get at least an A-; likewise 80% ensures you of at least a B-, 70% a least a C-, and 60% at least a D-.

Homework will be assigned every Tuesday on the course webpage, and is due the following Tuesday before class. Late homework will not be accepted. It is important to do the homework to master the material. There will be both online homework and written homework.

The midterm and final exams are closed book, and no calculators, computers, etc. are allowed. For the midterm, the only thing you are allowed to bring (besides a writing implement) is one letter-sized piece of paper containing handwritten notes, and there can only be writing on one side of this piece of paper. For the final (which is cumulative), you can bring one letter-sized piece of paper with handwritten notes on both sides. Exam dates are firm: all students must take the exams at the scheduled times, barring a university-authorized excuse.

If you think you need an accommodation for a disability, please let me know as soon as possible. In particular, a Verified Individualized Services and Accommodations (VISA) form must be provided to me at least *two weeks* prior to the need for a test/quiz accommodation. The Services for Students with Disabilities (SSD) Office (G664 Haven Hall; <http://ssd.umich.edu/>) issues VISA forms.