

Math 5435: Linear Algebra
Fall 2026
Thursday 6:30–9:00, Bannow 341

Instructor Chris Staecker

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Office Hours: M 8:30–9:30, 12:30–1:30, W 10–11, R 8:30–9:30, 5:30–6:30 or by appointment

Office hours are in my office or by Zoom: <https://fairfield.zoom.us/j/5514910533>

Course Website <http://faculty.fairfield.edu/cstaecker/courses/2026f5435/>



Textbook Strang, *Linear Algebra and its Applications*, 4th edition

Course Content

This graduate-level treatment of linear algebra includes general vector spaces; basis and dimension; linear transformations; linear operators and the relationship to matrices; inner product spaces and orthonormalization, least squares approximations, Hilbert spaces; diagonalization and other canonical forms for matrices; eigenvalues, eigenvectors, and applications to ordinary differential equations; and Hermitian, unitary, and positive definite matrices. The course also incorporates a discussion of the historical development of linear algebra, the relationship of linear algebra to analysis, and a coordinated introduction to a symbolic algebra program such as Maple or Mathematica.

Homework

Homework is due every Friday evening at 11:59PM. The homework does not need to be submitted during the class meeting, any time before midnight on the due date is acceptable. Assignments are posted at the class website.

Students will get a grade on each assignment based on completeness and correctness of the answers, with partial credit given for wrong answers.

Late homeworks without excuse will lose 1/3 credit for each calendar day.

Quizzes

A short quiz will be given at the beginning of each class meeting. The quiz will cover the material from the previous class. Any student can re-take up to 3 quizzes per semester. If you re-take a quiz, your new grade will replace the old one.

Students will not use calculators or any other electronic gadgetry during quizzes.

Students who need to miss a quiz should contact the professor ahead of time to make arrangements. If you simply do not show up to a quiz without letting me know ahead of time, you probably will not be allowed to retake it.

Online submission

No assignments or tests will be submitted on paper. All work will be submitted online at Gradescope.com. Students will take phone pictures of their work and submit it to Gradescope.

Grading

Your course grade will be inspired by an average:

Quizzes	60%
Homework	40%

Attendance

Attendance does not directly figure into your grade, so there is no penalty for missing class. Students who miss class are 100% responsible for making sure all assignments are still completed on schedule. The professor is happy to negotiate in case there are good reasons, but these negotiations must be initiated by the student.

AI

Modern AI tools are likely to be able to solve any of our homework problems. If you simply copy/paste AI output into your assignments, the professor will not respond kindly. Using AI for help is fine, but students must judge their own learning responsibly. Interacting with AI can give a false sense of understanding, so be careful.