

LINEAR ALGEBRA II
MATH 132 - WINTER 2016
MWF 1:10–2, SPROUL 1340

- Instructor: Carl Mautner
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- Office: Surge 255
- Office hours: TBA or by appointment
- Class website: <http://www.math.ucr.edu/~mautner/W16.html>
- Teaching Assistant: Hyun-Seung Choi

Course objectives: In this course we will continue from where you left off in Linear Algebra I, by learning more refined properties of linear maps. Our goal will be to understand the structure of linear operators on finite dimensional vector spaces defined over the real and complex numbers. Along the way we will study eigenvalues, minimal polynomials and canonical forms. We will also study inner-product spaces (i.e., vector spaces endowed with extra structure, like the dot product structure on \mathbb{R}^n) and the structure of linear operators on them.

Text: *Linear Algebra Done Right*, by Sheldon Axler. (available free online from UCR computers)

Grading: The grade will be based on homework assignments (25%), one in-class exam (30%) tentatively set for Friday, February 5, and a final exam (45%) on Wednesday, March 16, 7-10 pm. Final letter grade cut-offs will be made at the end of the quarter and will be no worse the standard scale (e.g., if you get above 90% you are guaranteed an A or A-).

Any instance of cheating will result in a failing grade for the course.

Homework: Homework will generally be assigned each class meeting and due a week later at the beginning of class. A list of the homework problems will be kept on the webpage. Late homework will not be accepted, but the lowest two homework grades will be dropped.

Collaboration: You are encouraged to discuss homework problems with other students. The final write-up of any solution, however, must be your own. Copying other students' solutions is cheating and treated as such.

Date: January 4, 2015.