

Linear algebra – Math 411
University of Hawai‘i at Mānoa
Spring 2015

Meetings: MWF 9:30am–10:20am, Keller 403

Lecturer: Robert Harron

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Office Keller 407

Office Hours to be determined

Course website: <http://math.hawaii.edu/~rharron/teaching/math411s15/>

Textbook: Charles Curtis' *Linear algebra, an introductory approach, Fourth edition*

Official description: Vector spaces over arbitrary fields, minimal polynomials, invariant subspaces, canonical forms of matrices; unitary and Hermitian matrices, quadratic forms.

Unofficial description: Linear algebra is one of the few fundamental tools in mathematics. It is used pretty much everywhere, from quantum mechanics to image processing to number theory, you name it. The aim of this course is two-fold. First, to put on a firm mathematical footing the linear algebra you have learned in the previous course, thus providing a conceptual framework for the material. Second, to develop more advanced tools that provide a deeper understanding of linear algebra, leading to further applications. You will be expected to develop your skills both in computation and proofs.

Assignments: There will be weekly assignments. Problems will be posted after each lecture, then bundled together and due at a specified time each week. Only a subset of the questions will be graded.

Exams: There will be one midterm during class time and a final during the usual exam period:

Midterm: Friday, Mar. 6, in class

Final: Friday, May 15, 9:45am–11:45am

Grading scheme:

Homework	20%	Midterm	30%	Final	50%
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Remarks:

- Calculators will **not** be allowed during exams.

Getting help: If you are having trouble with the course, or even if there are just some questions you would like to ask, it is important that you do so. Math is a subject that constantly builds on what has come before, so your problems can quickly snowball. Please talk to me if you have any questions, either after class time or stop by my office hours. Or better yet, ask your questions in class! Seriously.