

SYLLABUS: MATH 115A/5, LINEAR ALGEBRA
SPRING 2016

Time and location.

Lecture: MWF 2:00pm – 2:50pm, Geology 4645

Discussion section: TTh 2:00pm-2:50pm, Geology 4645

Course webpage: <http://www.math.ucla.edu/~chernikov/teaching/16S-MATH115A/>

Instructor.

Artem Chernikov

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Office hours: MW 3:30pm – 5:00pm

TA.

Christopher Ort

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Office: MS 3915E

Office hours: To be confirmed (see the course webpage).

Course description.

Prerequisites: 33A.

Textbook: S. Friedberg, et al, Linear Algebra, Custom UCLA 4th Ed., Prentice Hall.

Math 115A is a core mathematics course required of all the various mathematics majors. The course material can be regarded as an elaboration of the linear algebra already covered in Math 33A. However, the level of abstraction is higher and the emphasis is on proof technique. Successful students emerge from the experience not only with a better understanding of linear algebra, but also with a higher level of mathematical maturity, better equipped to deal with abstract concepts. *Keywords:* techniques of proof, abstract vector spaces, linear transformations, and matrices; determinants; inner product spaces; eigenvector theory.

Homework.

Problem sets will be *assigned each Friday* and will be *due at the end of the lecture the following Friday*. Each problem set will be handed out and posted on the course webpage. Graded homework will be returned to you in section meetings.

No late homework will be accepted. In the case that you cannot turn the homework in during class, you have to get your homework to me early or you will not receive credit. *Do not submit homework by e-mail.*

Each homework will consist of problems of varying difficulty, some of these problems will be from the textbook. Only a chosen portion of the problems will be graded, and an additional score will be assigned for completeness. For the computation of your final grade, *one lowest homework score will be dropped.*

Some of the problems for the exams may be taken directly from the homework, so it is in your interest to do homework on a regular basis.

Exams.

There will be two in-class midterm exams and a final exam (the dates of the midterms and the location are to be confirmed, see the course webpage).

Midterm 1: Monday, April 18

Midterm 2: Monday, May 16

Final exam: Monday, June 6, 11:30am – 2:30pm

There will be *no make-up exams* (see the grading rules section). According to the university policy, *a student who has an undocumented absence from the final exam will be given a failing grade in the course.* It is your responsibility to make sure that you have no exam scheduling conflicts.

Grading.

There will be two grading options for each student.

	Option 1	Option 2
Homework	15%	15%
Lowest Midterm Score	20%	0%
Highest Midterm Score	20%	30%
Final Exam Score	45%	55%

Your final class score will be computed as the *maximum of the two options.*

Grading complaints.

If you believe a problem on a homework assignment or an exam has been graded incorrectly, or that your score was not correctly recorded, you must bring this to the attention of the instructor *within 14 calendar days* of the due date of the assignment in question, or the date of the exam, and before the date of the final exam. Grading complaints not initiated within this period of time will not be considered.

The homework assignments in this course are graded by readers, but there is no reason to contact them — all grading disputes are handled by the instructor.