

Department of Mathematics, Oklahoma State University

Advanced Linear Algebra, Fall 2017
Math 4063 (CRN 62602 & 63452-Honors)
Math 5023 (CRN 62606)

Lectures:

Tuesday, Thursday, 9:00 – 10:15 AM in MS 514

Instructor: Mahdi Asgari

Office: MS 525 E-mail: asgari@math.okstate.edu Tel: 744-6718

Office Hours: Tuesday 12:00 PM - 1:00 PM in MLSC (5th floor of Library Building)

Thursday 8:00 AM - 9:00 AM in MS 525, or by appointment.

Textbook: Sheldon Axler, Linear Algebra Done Right, 3rd ed., (UTM), Springer, 2015.

(Hard copies can be purchased at the bookstore. Online version is also available free of charge from the library.)

WWW page: A web page with some information about the course, such as homework assignments, will be maintained at <http://www.math.okstate.edu/~asgari/teach.html>

Course Objective: Students in this course are expected to have completed Math 3013 (or equivalent material), which is the standard undergraduate level linear algebra course beyond the Calculus sequence. As such, you should be familiar with the notions of vector spaces, linear independence and bases and the related matrix calculations. The goal in this course is to further develop these notions of abstract linear algebra and provide a framework for applying linear algebra in a variety of mathematical and physical problems. There will be emphasis on proofs. Depending on your background, the homework may prove rather demanding and you should be prepared to spend six hours or so per week outside of class. It is important to seek help right away when you have difficulty. If you have any concerns about your preparation for this course, please talk with me early on in the course.

Note: If you are registered for the honors section, CRN 63452, of Math 4063, please talk with me during the first week or two so that we can discuss the requirements of earning honor credit.

Grading: Your final grade in the course will be based on the following:

Homework:	150 points	A: 450–500
Two In-class Exams:	100 points each	B: 400–449
Final Exam:	150 points	C: 350–399
Total:	500 points	D: 300–349
		F: 0–299

Depending on the median scores these cutoffs may be slightly lowered and some discretion of the instructor may be used in deciding borderline cases.

Exams: There will be two mid-term exams in this course plus a final exam given at the end of the semester. More details about the exams, including time and location and the material to be covered will be announced.

Homework: Homework problems will be assigned on a regular basis by posting to the web page for the course. The homework will not be graded just on your final answers, rather on the rigor of your arguments and the presentation and the details of that support your claims. Your solutions must be written in complete, grammatically correct sentence with the technical terms spelled correctly. They should be neatly written in the same order they are assigned and turned in when they are due. Please make sure you *staple* multiple pages, write *your name* legibly on top of the first page, and use only *one side* of the paper.

You are welcome to discuss problems with each other; however, what you turn in should be your own individual work and not copied or otherwise reproduced from others' work. This includes material in print or on the internet. *No late homework will be accepted.* The lowest two homework scores will be dropped in order to account for unavoidable missed work, e.g., due to illness. This eliminates the need for you to contact me or provide me with documentation for legitimate absences.

Updated: 08/21/2017

Class Attendance: It is not my intention to take daily roll; however, you will be responsible for knowing everything discussed or announced in class.

Etiquette: Electronic devices that go off during class present a distraction to other people in class. As a courtesy to others, please turn off and stow these devices before the class begins.

OSU Syllabus Attachment: For general university policies and important dates see the syllabus attachment for the current semester. It can be accessed at:

<http://academicaffairs.okstate.edu/current-students/>

You will also find information about academic integrity and other useful information on this website.

Note:The instructor reserves the right to make modifications to this course information sheet throughout the semester if it becomes necessary to do so.