

MATH 3333–Section 003 Linear Algebra

This is the information sheet for Linear Algebra, MATH 3333–Section 003, for the Spring Semester 2011. It is your responsibility to acquaint yourself with all the information in this handout, and with any modifications to it that may be announced in class.

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Class Time & Venue: The class meets from 10:30am until 11:20am on MWF in 102 PHSC.

Office Hours. Mon 9:00-10:00am; Tue 11:00-noon; Thu 10:30-11:30am.

Text and Course Outline. We shall cover Chapters 1 through 7 of the textbook; *Elementary Linear Algebra with Applications* (9th Edition), by B. Kolman and D. R. Hill.

This course provides an introduction to systems of linear equations, matrices and matrix algebra, inner products, determinants, linear transformations (and their representation via matrices), eigenvalues and eigenvectors, and diagonalization of real symmetric matrices.

In the early stages of the course you will learn how to manipulate matrices (row reduce, add, multiply, take inverses of (invertible) matrices) and how to compute determinants. As the course progresses you will encounter deeper levels of abstraction: vector space; basis; dimension; linear transformation (and its matrix representations); kernel; range; diagonalization. It is very important to work hard at the early stages of the course, and to make sure that the computational aspects become second nature to you. This will help you come to terms with the more abstract concepts later on.

Lectures. You are expected to attend all lectures, and are responsible for all information given out during them. In particular, this includes any changes to the midterm dates or content.

Your participation is important in lectures. I will call on people to present answers to problems at the board from time to time. You should try to participate in classroom discussions. As in any course, you will optimize your gain from the lectures if you try to read the relevant sections of the textbook **before** attending class.

Grading Scheme. Grades will be assigned by weighting your totals from Homework, Midterms, and a Final Examination as follows:

<i>Homework</i>	20%
<i>Midterm Total</i>	54%
<i>Final Examination</i>	26%

The total number of points in the course is 100. Grades are assigned on the following scale:

$$A : 85 - 100, \quad B : 70 - 84, \quad C : 55 - 69, \quad D : 40 - 54, \quad F : 0 - 39.$$

Here is a detailed description of each of these components.

Homework. Homework is due in class at the **start** of class on Mondays and Fridays. You are responsible for ensuring that your homework gets turned in on time. Late homework will not be accepted; it upsets the grading process and is unfair to other students.

The homework assignments are there to provide you with a **minimum** level of exposure to the materials outside of class time. You will need to do many more problems before you feel comfortable with the concepts involved. Take it from experience (of generations of students!) that the way to succeed in a math course is to work (and understand) a large number of problems.

Midterms. There are three midterms. They are held on the following dates:

Midterm 1: Friday, Feb. 18.

Midterm 2: Friday, Mar. 25.

Midterm 3: Friday, Apr. 22.

Final Examination. The final examination is cumulative. It is scheduled for 8:00am–10:00am on Thursday, May 12, 2011, and is held in the usual classroom — PHSC 102.

The final examination schedule for all your classes is available online

http://www.ou.edu/content/enrollment/home/final_exams/spring_semester_final.html

Taking Examinations. Here are a few notes on taking Examinations.

- You cannot use calculators/computers, books or any type of notes during the examinations.
- All examinations must be taken at scheduled times, except in *very extreme circumstances*. So be careful not to make travel arrangements that conflict with examination times. If you cannot take an examination at a scheduled time, you should contact me *well in advance of the test time*. Otherwise, an absence at an exam will result in a score of zero.

Policy on W/I Grades. You can find the Spring 2011 academic calendar at

http://www.ou.edu/enrollment/home/academic_calendar.html

Until Jan 31, there is no record of grade for dropped courses. From Feb 1 through Feb 25, you may withdraw and receive an automatic W grade, *no matter what scores you have so far achieved*. From Feb 28 onward, the grade for a dropped course is either W or F; you will need to see me about grades if you wish to withdraw. From April 4 on, University regulations specify that you may withdraw only with the permission of the College Dean.

Students who are failing the course should not expect to receive an “I” grade in place of a “W” grade. I will only consider assigning an “I” grade if the situation satisfies the following criteria.

1. the student is already maintaining a passing grade,
2. the student has completed most of the course work, and
3. the student can demonstrate that he/she is unable to complete the work at this time due to circumstances beyond his/her control.

Academic misconduct. You should be familiar with University policy regarding academic misconduct <http://www.ou.edu/provost/integrity>. More information can be found in the *Student Code* on the Student Conduct Office page <http://studentconduct.ou.edu/>.

Accommodation of Disabilities. The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. If you require special accommodation in this course you are requested to speak with me as early in the semester as possible (preferably by the end of the first week). Students with disabilities must be registered with the Office of Disability Services prior to receiving

accommodations in this course. The Office of Disability Services is located in Goddard Health Center, Suite 166, phone (405) 325-3852 or TDD only (405) 325-4173. Their website is at <http://drc.ou.edu>.

Religious Holidays. It is the policy of the University to excuse absences of students that result from religious observances and to provide without penalty for the rescheduling of examinations and additional required class work that may fall on religious holidays.

Students who plan to observe a religious holiday which may conflict with a class time, should notify me as soon as possible (preferably within the first week of the semester), so we can make appropriate arrangements.

The OU MathClub Blog. The [OU MathClub blog](#) is an excellent way of finding out what's going on math-wise at OU.

Tutoring. The Mathematics Department main office (423 PHSC) maintains a list of graduate students who provide (paid) tutoring services to students taking mathematics courses.