

DEPARTMENT OF MATHEMATICS
COURSE INFORMATION FOR MATH 3333

Sections 001 and 004

Linear Algebra I

Fall 2014

001: MWF 12:30-1:20pm, PHSC 0323

004: MWF 2:30-3:20pm, NH 0251

Instructor: Dr. Christina Durfee
Office: 1011 PHSC
Office Phone: 405-325-0766
Office Hours: MW 3:30-4:30 and by appointment
E-mail: cdurfee@ou.edu

Prerequisites: MATH 2433 or MATH 2924.

Text: *Elementary Linear Algebra (9th ed)*, by B. Kolman and D. R. Hill, Pearson/Prentice Hall, 2008, ISBN 0-13-229654-3.

Material Covered: The course will cover most sections of chapters 1-7. A schedule of the sections covered is included near the end of the syllabus.

Grading: The grade will be based on weekly homework assignments, 3 in-class 15 minute quizzes, 3 in-class 50 minute midterm exams, and a cumulative final exam. The grade will be determined as follows:

Homework 12%
Quizzes 9%
Midterm 1 18%
Midterm 2 18%
Midterm 3 18%
Final Exam 25%

The cutoffs for the letter grades A, B, C, and D will be 88%, 76%, 64%, and 52% respectively.

Attendance and make-up exams: Students who miss class are responsible for all material covered in class. Make-up exams or quizzes will be allowed only with a valid excuse and should be taken within a few days of the missed exam or quiz. The midterm and final exam dates are listed in the important dates section. Please let me know as soon as possible if you have a conflict with one of the exams. The quiz dates are not yet scheduled but will be about halfway through the material for each of the three exams.

Policies on Homework: There will be weekly homework assignments posted on D2L. Assignments will usually be due on Mondays and cover the material from the previous week. Homework will be collected in class but can also be turned in during office hours the day that they are due. No late homework will be accepted, however the lowest two homework scores will be dropped. If you are going to miss class, you can hand in homework early by putting it under the door to my office. Please make sure your assignments are stapled and have your name on them. Also make sure to write legibly and show your work. You may work with others on homework as long as everyone writes up their own solutions.

Calculator Policy: Calculators will not be allowed on exams or quizzes. They may be used on homework assignments, but try not to become dependent on them.

Some important dates:

- (1) First day of classes: Monday, August 18, 2014.
- (2) Labor day holiday (no classes): Monday, September 1, 2014.
- (3) Midterm 1: Wednesday, September 17, 2014.
- (4) OU-Texas football game holiday: Friday, October 10, 2014.
- (5) Midterm 2: Monday, October 20, 2014.
- (6) Last day to withdraw with an automatic *W*: Friday, October 24, 2014
- (7) Midterm 3: Wednesday, November 19, 2014.
- (8) Thanksgiving break (no classes): November 26–28, 2014.
- (9) Last day of classes: Friday, December 5, 2014.

- (10) Final exam: Section 001 - Tuesday, December 9, 1:30-3:30pm. Section 004 - Wednesday, December 10, 4:30-6:30pm.

Schedule of Topics:

Week	Dates	Topic	Sections
1	Aug 18-22	Systems of Linear Equations	1.1-1.2, 2.1-2.2
2	Aug 25-29	Matrix Operations	1.2-1.4
3	Sept 1-5	(Labor Day) Special Types of Matrices and Inverses	1.5, 2.3
4	Sept 8-12	Determinants	3.1-3.3
5	Sept 15-19	Review, Exam 1, Introduction to Vector Spaces	4.1
6	Sept 22-26	Vector Spaces, Subspaces, and Span	4.2-4.4
7	Sept 29-Oct 3	Linear Independence, Basis and Dimension	4.5-4.6
8	Oct 6-10	(Football Holiday) Homogeneous Systems, Coordinates	4.7-4.8
9	Oct 13-17	Rank and Review	4.9
10	Oct 20-24	Midterm 2, Inner Products	5.1, 5.3
11	Oct 27-31	Gram-Schmidt Process, Orthogonal Complements	5.4-5.5
12	Nov 3-7	Linear Transformations, Kernel and Range	6.1-6.2
13	Nov 10-14	Matrix of a Linear Transformation and Similarity	6.3, 6.5
14	Nov 17-21	Review, Midterm 3, Eigenvalues	7.1
15	Nov 24-28	(Thanksgiving) Diagonalization	7.2
16	Dec 1-5	Diagonalization of Symmetric Matrices and Review	7.3

Academic misconduct: All cases of suspected academic misconduct will be referred to the Dean of the College of Arts and Sciences for prosecution under the University's Academic Misconduct Code. The penalties can be quite severe. **Don't do it!** For more details on the University's policies concerning academic misconduct see

http://integrity.ou.edu/files/Academic_Misconduct_Code.pdf

This link also has information about students' rights to appeal charges of academic misconduct. For information about admonitions (either accepting or contesting them) see

<http://integrity.ou.edu/files/Admonition.pdf>

Students are also bound by the provisions of the *OU Student Code*, which can be found at

<http://judicial.ou.edu/content/view/27/32/>

Students with disabilities: The University of Oklahoma is committed to providing reasonable accommodation for all students with disabilities. Students with disabilities who require accommodations in this course are requested to speak with the instructor as early in the semester as possible. 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.