

MATH 3333: Linear Algebra I
Course Syllabus
Spring 2015

Section 002
MWF: 1:30 - 2:20 pm
PHSC 323

Instructor: Dr. Matt McBride
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Office Hours: MWF: 12:30 – 1:30 pm or by appointment
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Textbook: Bernard Kolman and David R. Hill, *Elementary Linear Algebra with Applications*, 9th Edition

Prerequisites: MATH 2433 or MATH 2934

Objective: Linear algebra is an important topic and plays a significant role in mathematics as well as other sciences and engineering (STEM) courses. In this course we will learn about systems of linear equations, matrices and matrix algebra and their properties, inner products, linear transformations (and their representation via matrices), eigenvalues and eigenvectors, vector spaces and applications.

Withdrawl Date: Through March 27th, you may drop the course and receive a W grade. Dropping the course after March 27th requires a petition to the Dean, and will result in a grade of either W or F.

Academic Honesty: The University of Oklahoma takes great pride in academic honesty, thus cheating of any kind will not be tolerated. If cheating is suspected, there will be consequences.

Students with disabilities: The University of Oklahoma is committed to providing reasonable accomodation for all students with disabilities. If you require special accomodation in this course you 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 accomodations in this course. For further information please see <http://drc.ou.edu>.

Homework: As with any math course, homework is a vital component. One must practice newly learned facts, theorems, etc. through the assigned homework. Homework will be assigned daily, however it will be collected only once a week except during exam weeks. See the schedule for the due dates.

Exams: There will be three closed book, closed notes, and closed homework in-class exams. Students will have the whole class period to take the exams. All three exams will cover roughly nine sections, though this may be modified due to time and is left up to the discretion of the instructor. See the schedule for the exact sections covered.

Final Exam: The final exam is a comprehensive exam and will be held on **Thursday, May 7th** in the usual class location at **8:00 - 10:00 am**. This date can **not** be modified, so make sure one's calendar is free.

Make-up Policy: Make-up exams will be given **only** for reasons deemed acceptable by the instructor, and **only** with written documentation. Make-up exams must be taken within one week of the original date, and no make-ups may be taken after the final exam. Make-up exams are never easier than the original.

Calculator Policy: You may use any type of calculator when working on the homework assignments. When taking exams, a calculator is not really needed, however, if you wish, you may use a calculator that does not have any matrix capability while taking exams, just to check your arithmetic. The reason for the exclusion of matrix capability is the fact that we are learning about these manipulations. Given the nature of the problems you really won't need a calculator.

Grading Distribution:

Homework.....	25%
Exams.....	45%
Final Exam.....	30%
Total.....	100%

Grading Scale:

A:	100% - 90%
B:	89% - 80%
C:	79% - 70%
D:	69% - 60%
F:	59% and below

Spring 2015 Tentative Schedule

Note: this may be modified and is left to the discretion of the instructor.

Date	Sections Covered/ HW Due	Homework Assigned
Mon, Jan. 12	1.1	1.1: 5-13 odd,15-18
Wed, Jan. 14	1.2	1.2: 4-8,13,18,19
Fri, Jan. 16	1.3	1.3: 2,11-15 odd,19,43-45,51
Wed, Jan. 21	1.4	1.4: 9-12,22,25,32-36
Fri, Jan. 23	1.5 (1.1-1.3 due)	1.5: 3,6,8,9,21-24,27,56
Mon, Jan. 26	1.6	1.6: 9-14,20
Wed, Jan. 28	2.1	2.1: 1-3 odd,13
Fri, Jan. 30	2.2 (1.4,1.5 due)	2.2: 1-9 odd,14,15,21,22,29
Mon, Feb. 2	2.3	2.3: 7,11,12,19,21
Wed, Feb. 4	2.4 4.1	2.4: 2,9 4.1: 12,13,17,22
Fri, Feb. 6	4.2 (1.6,2.1,2.2 due)	1,3,10,15,19
Mon, Feb. 9	4.3	4.3: 9,15,17,19,20
Wed, Feb. 11	Review for Exam 1	none
Fri, Feb. 13	Exam 1	Covering: 1.1-1.6,2.1-2.4
Mon, Feb. 16	4.4	4.4: 2,4,5,6,8
Wed, Feb. 18	4.5	4.5: 1,3,11-15,25
Fri, Feb. 20	4.6 (2.3,2.4,4.1,4.2 due)	none
Mon, Feb. 23	4.6 4.7	4.6: 1,5,6,19,25,31,33,34 4.7: 1-9 odd,17,25
Wed, Feb. 25	4.8	4.8: 1,3,7,9,29,32,33,35,36
Fri, Feb. 27	4.9 (4.3-4.5 due)	4.9: 1,2,9,13,21,33,35
Mon, Mar. 2	5.1,5.3	5.1: 2,7,9,18,31,33
Wed, Mar. 4	5.3	5.3: 3,7,11,16,21,29,36,44,48,49
Fri, Mar. 6	/ (4.6-4.9 due)	/
Mon, Mar. 9	/	/
Wed, Mar. 11	Review for Exam 2	none

Date	Sections Covered/ HW Due	Homework Assigned
Fri, Mar. 13	Exam 2	Covering: 4.1-4.9
Mon, Mar. 23	5.4	5.4: 1,5,7,10,24,25
Wed, Mar. 25	3.1	3.1: 1,3,9,11,13,14
Fri, Mar. 27	3.2,3.3 (5.1,5.3 due)	3.2: 1,7,9,15,16,17,19,22,23,31,32
Mon, Mar. 30	3.3	3.3: 4,5,7,12,13
Wed, Apr. 1	3.4	3.4: 2,3,9,10,14
Fri, Apr. 3	6.1 (5.4,3.1,3.2 due)	6.1: 1,3,8,11,15,24,25
Mon, Apr. 6	6.2	6.2: 1-9 odd,15,25,26
Wed, Apr. 8	6.3	6.3: 1-9 odd,18-20
Fri, Apr. 10	6.5 (3.3,3.4,6.1)	6.5: 1,5,6-8,11
Mon, Apr. 13	7.1	7.1: 5-11 odd,14,17,21,23-25
Wed, Apr. 15	Review for Exam 3	none
Fri, Apr. 17	Exam 3	Covering: 5.1,5.3,5.4,3.1-3.4,6.1-6.3,6.5
Mon, Apr. 20	7.2	7.2: 1,3,4,7,15,17,21,22,24,26 (For 17, find the generalized eigenvectors)
Wed, Apr. 22	7.3	7.3: 1,3,4,8,14,17,19,37,38
Fri, Apr. 24	8.2 (6.2,6.3,6.5,7.1 due)	8.2: Handout
Mon, Apr. 27	Review for Final Exam	none
Wed, Apr. 30	Review for Final Exam	none
Fri, May 1	Review for Final Exam (7.2,7.3,8.2 due)	none
Thur, May 7	Final Exam	8:00-10:00am in PHSC 323