

Math 3333-004  
Linear Algebra I

**Instructor:** Prof. Josh Barnard  
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**Course Webpage:** <http://math.ou.edu/~jbarnard/teaching/F04-3333/>  
**Class Time:** MWF 11:30-12:20 in PHSC 321  
**Office Hours:** W 9-10, R 2-3 or by appointment

**Textbook:** The textbook for this course is *Elementary Linear Algebra (8th edition)*, by Kolman and Hill (Pearson Prentice Hall 2004). We will cover much of the first seven chapters of the book.

**Grading:** Grades will be determined according to the following:

Homework/Quizzes — 15%  
Four Midterms — 15% each  
Final Exam — 25%

**Exams:** There will be four midterm tests and a final exam. Tentative dates for the midterms are **Monday, February 7; Friday, February 25; Monday, March 28; and Monday, April 18**. The final exam is scheduled for **Friday, May 13, 1:30–3:30**. All tests will be held in the usual lecture room. University regulations require you to take the final at the scheduled time. The final will be cumulative, with emphasis on that material not covered on previous tests. If you cannot take a test at the scheduled time, you should contact me *in advance*.

**Homework/Quizzes:** Homework will be assigned and collected roughly once a week. Late homework will not be accepted. Only selected problems will be graded, and you will know ahead of time which problems these are. There may be sporadic quizzes in class over the semester. These will usually (but not necessarily) be announced. Each quiz will also be graded out of twenty points. Your lowest two homework/quiz scores will be dropped at the end of the semester.

**Attendance:** Routine attendance in this class is essential and expected.

**Important Dates:** Through Monday, January 31 you may drop the class with a 100% refund and no record of any grade. Through February 25 you may drop the class and receive an automatic grade of W. Through April 1 you may drop the class and receive a W only if you have a passing grade at the time of withdrawal. Through May 6 you may drop the class only with permission from the dean, and then receive a W only if you have a passing grade at the time of withdrawal. Avoidance of a low grade is not sufficient reason to obtain permission to withdraw after April 1.

**Calculators:** This is a course in mathematical concepts and techniques, not a course in mechanical computation. As such, calculators are neither necessary nor allowed for any exams.

**Resources:** If you have any questions or problems, you are encouraged to come by my office during office hours, or make an appointment to come by some other time. Email is the best way to contact me.

**Student 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 professor 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.

**Academic Misconduct:** Procedures for dealing with cases of academic misconduct have changed as of Fall 2004. Students are assumed to be familiar with the current Academic Misconduct Code, details of which may be found at

<http://www.ou.edu/provost/integrity>

**Advice:** *Keep up!* If you fall behind, *catch up!* If you're having trouble catching up, *seek help!* In this course we'll be heading out in what is likely a completely new direction for you. We'll be taking familiar mathematical concepts (notation and all) and *abstracting* them. We'll be worrying less about what things actually mean, and more with the properties, or patterns, they display. We'll be making use of the *duck principle*: if it walks like a duck and talks like a duck, it's a duck. For example, "plus" will no longer necessarily refer to good old fashioned addition, nor even to fancy vector (in the sense of vector calculus) addition. In fact, "plus" will often refer to multiplication (because multiplication walks and talks like "plus").

I've never known anyone to coast through this course; I certainly didn't when I was an undergrad. It requires hard work. The few homework problems that are required (because they are graded) are most likely not enough for you to understand fully everything that's going on. There will always be other suggested problems that you should spend some serious time working on. Also, don't do all of your homework in one go. Instead, do a little each day. This is the best trick for making test time less stressful. More than just hard work, this course requires hard thinking. You may spend half an hour or more on a single problem, where the first 29 minutes are spent thinking, staring, remembering and scribbling. You then write up a complete solution in one minute and it takes up only two lines of paper. The point is that, perhaps more so than any math course you've had before, this course is about *understanding concepts*, not long calculations (although we will have plenty of those, too). This is why it is imperative for your survival that you KEEP UP, CATCH UP, and SEEK HELP.