

**Math 2270-1**

**Linear Algebra**

**Summer 2011**

**Instructor:** Andy Thaler

**Office:** LCB loft (4<sup>th</sup> floor of the LeRoy Cowles Building on President's Circle)

**Office Hours:** Mondays 8:30-9:30 a.m.  
Tuesdays 8:30-9:30 a.m.  
By appointment

**Class Meeting Time:** MTWH 10-11 a.m. in JTB 320 (James Talmage Building)

**Email:** [thaler@math.utah.edu](mailto:thaler@math.utah.edu)

**Website:** [www.math.utah.edu/~thaler](http://www.math.utah.edu/~thaler)

**Note:** There will be no class on the following days:

Monday, May 30 (Memorial Day);  
Monday, July 4 (Independence Day);  
Monday, July 25 (Pioneer Day).

**Text:** *Introduction to Linear Algebra*, 4<sup>th</sup> edition, by Gilbert Strang. I strongly recommend that you read the sections of the textbook that will be discussed in lecture before coming to class. This will help you to get a grasp of the content that will be covered. I understand that it may not always be possible to read the book before class; in this case, I strongly encourage you to read the textbook after the lecture.

**Prerequisites:** “C” or better in MATH 2210 OR MATH 1260 OR MATH 1280. Fulfills Quantitative Reasoning (Math & Stat/Logic).”

**Course Description:** “Euclidean space, linear systems, Gaussian elimination, determinants, inverses, vector spaces, linear transformations, quadratic forms, least squares and linear programming, eigenvalues and eigenvectors, diagonalization. Includes theoretical and computer lab components.”

**Homework:** Homework assignments will be given on a (generally) weekly basis (usually given on Tuesday and due the following Tuesday). It is **IMPERATIVE** that you show your work on homework problems, as this will help you present the solutions in an organized, accurate fashion, as well as give me the opportunity to award partial credit. If no work is shown, no credit will be given. In addition, homework must be neat and legible. **NO LATE HOMEWORK WILL BE ACCEPTED.** That is, all homework needs to be turned in to me by 11:15 a.m. on the due date. Your lowest two homework scores will not be included in the computation of your final grade.

**Computer Lab:** There will be a few computer lab assignments in addition to homework assignments that will be included in the homework grade. No prior experience with MATLAB or Maple will be assumed.

**Practice Problems:** A great way to study for exams (and to have fun on weekends) is to do some of the problems in the book that were not assigned as homework problems. University policy 6-100 Section 2 states, “A university credit hour shall represent approximately three clock hours of the student’s time a week for one semester.” This means that you should spend approximately 8 hours per week studying for this course. The assigned homework problems are a minimum—additional problems should be studied for more practice.

**Exams:** There will be two midterm exams and a final exam. The final exam will be comprehensive. If you must take an exam at a date other than the assigned date, I need to be notified BEFORE the exam; otherwise I reserve the right to give a score of 0 on that exam. The first exam will take place on **Thursday, June 16**; the second exam will take place on **Thursday, July 22**. The exams will be given during the normal class time. The final is scheduled for **Thursday, August 4, from 10 a.m.-12 p.m.** in our classroom (JTB 320).

**Calculators:** Calculators are not allowed on exams. You are free to use any calculator you like on homework, although for practice purposes I recommend that you perform most calculations and graphing by hand.

**Grades:** There will be no curving of the grades in this class, as I feel this leads to competition between students and can lead to unfair grade assignments. However, there may be opportunities for extra credit given ONLY in association with homework and exams. Your grade will be computed with the following weights:

Homework: 40%

Exams: 30% (15% each)

Final: 30%

The grading scale will be as follows (where usual rounding techniques are used, *e.g.*, 92.53% will be rounded up to 93%, whereas 92.4% will be rounded to 92%):

	87-89 B+	77-79 C+	67-69 D+	
93-100 A	83-86 B	73-76 C	63-66 D	0-59 E
90-92 A-	80-82 B-	70-72 C-	60-62 D-	

**Tutoring:** The Benny T. Rushing Math Center (located in the basement of LCB) offers free drop-in tutoring for students at the U. This is a wonderful resource! Information about private tutors can also be found at the Math Center.

**ADA Statement:** “The University of Utah seeks to provide equal access to its programs, services and activities for people with disabilities. If you will need accommodations in the class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Union Building, 581-5020 (V/TDD). CDS will work with you and the instructor to make arrangements for accommodations.” ([www.hr.utah.edu/oeo/ada/guide/faculty/](http://www.hr.utah.edu/oeo/ada/guide/faculty/))