

**Linear algebra II (Math 129B), Spring 2012**  
**Sweeney Hall 240, MW 10:30am–11:45am (Sec. 02, code 29605)**

**Instructor:** Dr. Tim Hsu (pronounced “shoe”).

**Office and phone:** MacQuarrie Hall 419, (408)924-5071.

**Office hours:** TBA. Current schedule available at:

<http://www.math.sjsu.edu/~hsu/courses/generic/sched.pdf>

**E-mail:** [hsu@math.sjsu.edu](mailto:hsu@math.sjsu.edu). I can be reached by e-mail at many times of the day, and will try to respond within 24 hours.

**Course web page:** <http://www.math.sjsu.edu/~hsu/courses/129b/>

**Text:** *Linear Algebra: Gateway to Mathematics*, Robert Messer.

**Grading:** Your semester grade consists of:

Homework:	20%
Exam 1:	14%
Exams 2–3:	18% each
Final exam:	30%

**Goals of the course.** This course has two main goals: to teach you the underlying theory of linear algebra, and to introduce you to proofs and abstraction in the service of learning a mathematical subject. Much of your classwork, homework, and exam work will therefore consist of reading, writing, and understanding proofs in linear algebra. However, don't worry if you are not yet comfortable with proof and abstraction; we'll spend significant amounts of class time talking about methods and concepts of proof.

**Prerequisites.** You are assumed to have taken Math 129A (Linear algebra I) or equivalent. Specifically, you should know how to add vectors in  $\mathbb{R}^n$ ; multiply, row-reduce, and invert matrices; and solve systems of linear equations. If you need to review, the relevant material can be found in Chapters 2, 5, and 7 of our text.

You should also either have passed Math 108 or be taking it now.

**First homework.** To remind you of what you should know, there will be a review homework (PS00) due **Mon Jan 30**. **If you do not turn this homework in on time, you may be prevented from adding this class.** If you have substantial problems with PS00, you will need to spend a lot of extra time reviewing at the beginning of the class, as we will spend little or no time reviewing computational topics.

**Class is a cell-free zone.** Please turn off all cellphones before you get to class.

**Homework.** Homework will be due roughly once a week, with an outline of problem set 01 due **Wed Feb 01**, and the final version due **Mon Feb 06**. For more details on the process of doing homework, see the handout on homework.

Specific homework assignments will be determined as the term progresses. For a complete list of all homework assigned to date, and downloadable versions of almost all handouts from class, you can always check the course web page.

**Exams.** We will discuss this topic in more detail before the first exam, but briefly, the material on exams will mostly resemble the material from the homework. All exams are closed-book.

**Calculators.** You will *not* be allowed to use calculators for *any* in-class exams. The numerical work on exams will be simple enough that a calculator shouldn't be necessary, and numerical mistakes won't count for much.

**Exam dates.** The dates of our three in-class exams and final exam are found on the syllabus below. In particular, the final exam will be held on **Fri May 18**, from **9:45am–noon**. Please make sure that you are still on campus at that time (e.g., don't buy a plane ticket that leaves town on May 17).

**How to add this course.** If you are not registered for this course, and you would like to add it, you must first put a full effort into completing all of the work in the course. Second, if you are a graduating senior, you need to produce documentation to verify that.

I'll make a waiting list, which you get on by filling out and turning in the information form for the course. I'll give out add codes starting **Mon Feb 06**, mainly based on completeness of homework, and as long as there is room, I will continue to give out add codes until add date (**Mon Feb 13**). Note, however, that graduating seniors have the highest priority, and that Open University students have the lowest priority.

**How to drop this course.** Until **Mon Feb 06**, you can drop at [my.sjsu.edu](http://my.sjsu.edu). Nothing will appear on your transcript, but please let me know if you drop.

To drop after **Mon Feb 06**, you must go to the student services center and submit a Course Drop form to the Director of Academic Services. Dropping under these circumstances is only allowed for “serious and compelling reasons” (course catalog). A low grade is not a serious and compelling reason.

**Academic integrity.** Your commitment to learning (as shown by your enrollment at SJSU) and SJSU’s Academic Integrity Policy require you to be honest in all of your academic course work. Faculty are required to report all infractions to the Office of Student Conduct and Ethical Development. See: [http://sa.sjsu.edu/student\\_conduct](http://sa.sjsu.edu/student_conduct)

**Disabilities.** If you need course adaptations or accommodations due to a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with the Disability Resources Center to establish a record of their disability.

### Syllabus (revised Feb 21)

Date	Reading	Date	Reading
Wed Jan 25	1.2, 1.5, 1.6	Mon Mar 26	<b>NO CLASSES</b>
Mon Jan 30	1.7, 1.3–1.4	Wed Mar 28	<b>SPRING BREAK</b>
Wed Feb 01	1.8	Mon Apr 02	6.5
Mon Feb 06	3.1–3.2	Wed Apr 04	8.1
Wed Feb 08	3.3	Mon Apr 09	8.1–8.2
Mon Feb 13	3.4–3.5	Wed Apr 11	8.3
Wed Feb 15	3.5	Mon Apr 16	8.3
Mon Feb 20	<b>Exam 1</b>	Wed Apr 18	4.1
Wed Feb 22	3.6	Mon Apr 23	<b>Exam 3</b>
Mon Feb 27	6.1	Wed Apr 25	4.2
Wed Feb 29	6.2	Mon Apr 30	8.4
Mon Mar 05	6.2, 6.6	Wed May 02	8.4
Wed Mar 07	6.7	Mon May 07	SVD
Mon Mar 12	6.8	Wed May 09	SVD
Wed Mar 14	6.3	Mon May 14	Review
Mon Mar 19	<b>Exam 2</b>	<b>Fri May 18</b>	<b>Final exam,</b>
Wed Mar 21	6.3–6.4		<b>9:45am–noon</b>