Overview
Linear algebra pervades modern mathematics and science. At bottom, the subject concerns solutions to sets of linear equations. However, it happens to be far more rich—both in theory and application. We will explore some of this richness—particularly as it involves geometry.

Text
J. Holt, *Linear Algebra with Applications*

Exercises
There will be regular assignments consisting of reading and exercises. This work will form the core of the course. Many of the items will be posted on the class WebAssign page. (Instructions for obtaining a WebAssign account can be found on the class website.)

Although you won’t submit the I strongly urge you to write out your work. I also encourage you to work with others and to consider the problems at some length before asking about them in class. Our goal is a mutually-achieved understanding. This, however, requires discovery at an individual level. I will not “perform” solutions for the class. Rather, I’ll attempt to provide a helpful way of looking at the problem.

Exams
There will be one mid-term exam (about week 8) as well as a comprehensive final exam. These will be taken individually. Study guides will appear a week or two in advance. Exam items will be taken from the study guides as well as assigned exercises that don’t appear on WebAssign. Careful and thorough work on the assignments and engaging in class exercises and discussions should prepare you for the exams.

In the event of a medical or personal condition that compels you to miss an exam, a make-up exam will be given. Please try to notify me in advance of such a circumstance.

WWW
Materials related to the course (course description, assignments, learning resources) will appear at

www.csulb.edu/~scrass/teaching

Please make recommendations for things that you’d like to see on the site.
Evaluation
Exercises 40%
Midterm* 30%
Final 30%

*If the score on the final exam is higher than on the respective midterm, the midterm score will be replaced by the average of the midterm and final scores.

To each individual part of your work I will assign a mark 0-10. The meaning of these scores follows.

10 . . . . Clear, elegant, mathematically correct, shows special insight
9 . . . . . . Clear, some elegance and insight, mathematically correct
8 . . . . . . Mathematically correct, little elegance and insight
7 . . . . . . Mostly mathematically correct, little elegance and insight
6 . . . . . . Some significant misconceptions or shortcomings
5 . . . . . . Quite significant misconceptions
0-4 . . . . Math of varying degree of scant value—shows little effort.

Here’s an indication of how grades will be assigned. These are minimum standards. The actual boundaries between grades might be lower than these, but won’t be higher.

90-100% A
80-90% B
70-80% C
60-70% D

Pass/Fail: To receive a pass, you must achieve the equivalent of a C-.

Let me know if you’re happy or unhappy about something.

Key to comments on marked papers

a This needs a supporting argument.
a? What’s the argument—the line of reasoning—here?
d Describe what’s going on here.
e Explain what you’re doing here.
h? How did you get this?
i Illustrate what your talking about—give an example, a picture, etc.
m The meaning here isn’t clear.
p A picture would help here.
s This is not a sentence.
w Wording is awkward, confusing, etc. Meaning is unclear.
y? Why is this so? What’s the connection to what you’ve already said?
! Very nice. Something especially clear, insightful
? What this means or what you’re doing is unclear. Where does this come from?
X Something’s wrong here—in concept or calculation.
✓ This is right—you have the idea.
Fine Print

Withdrawal  A copy of the School of Natural Sciences withdrawal policy is available from the Department Office. Note that it’s different from the University withdrawal policy and the deadlines are earlier. Deadlines to which you should pay particular attention to appear below. Withdrawals from this course will be allowed only in accordance with University and College policies. Please be aware of the more specific and restrictive withdrawal policy for the College of Natural Sciences and Mathematics.

   Weeks 1-2.  Withdrawals will not appear on the student’s permanent record.

   Weeks 3-8.  Withdrawals are permissible only for serious and compelling reasons. Academic progress unsatisfactory to the student is considered a serious and compelling reason during this period. Instructor and Department Chair signatures on the drop form are required.

   Weeks 9-12.  Withdrawals are permissible for serious and compelling reasons, but during this period, unsatisfactory academic progress is not considered a serious and compelling basis to drop a course. Circumstances must be shown that preclude the student from attending class or from any effective opportunities to study. In addition to the normal withdrawal form, a special form must be completed, and instructor and department chair signatures are required.

   Weeks 13-15.  Withdrawals are permissible only for serious accident or illness and involve a total withdrawal from the University. Detailed written documentation must accompany withdrawal forms. Instructor, chair, and college dean signatures are required.

Disability  It is the student’s responsibility to notify the instructor in advance of their need for accommodation of a disability that has been verified by the University.

Cheating/Plagiarism  Cheating and plagiarism are in violation of the California Administrative Code, Title 5, Section 41301. CSULB has adopted a specific policy with respect to the violations of this nature (see the Bulletin or Schedule of Classes). Any student in violation of this code and policy in any assignment or examination related to this course shall be subject to the options specified in the policy statement. This may result in the student receiving a failing grade in the course or, in certain circumstances, being expelled from the University.