

SPRING 2005
MATHEMATICS 240 – CLASS NUMBER 1051
LINEAR ALGEBRA – 3 UNITS
5:30–6:45 P.M. MONDAYS & WEDNESDAYS AT BELL TOWER 1471

Instructor

Robert Diaz

Office Hours

11:15–12:15 A.M. Mondays & Wednesdays, or by appointment at BTW 1145

Web page and Email

-  <http://faculty.csuci.edu/robert.diaz>
-  robert.diaz@csuci.edu

Course Information

Topics include: matrices, linear systems of equations, determinants, vectors in 2 and 3 dimensions, eigenvalues, the vector space \mathbb{R}^n , linear transformations, introduction to general vector spaces and applications.

Required Textbook

[1] Anton, Howard., Rorres, Chris. *Elementary Linear Algebra: Applications Version*, eighth edition. New Jersey: John Wiley & Sons Inc., 2000.

Other Supplies

A set of colored pencils/pens, index cards and a stapler are strongly recommended. Nothing above a TI-86 calculator is allowed.

Free Tutoring Lab

The math tutoring center is now located at room 1512. It will be open 10:00 A.M.–7:00 P.M. Mondays–Thursdays, and also on Fridays (TBA).

Homework

The purpose of written homework in this course is to develop skills in understanding and communicating mathematics. It is not to give you busy work or drill. Don't think of your homework paper as a certificate proving that you have done the assignment. Think of it as an exercise in learning and in reporting what you have learned.

Homework will be assigned weekly consisting of exercises that I will put together. It is your responsibility to have all of the problems correctly completed by the due date. Show all your work and make sure that it is stapled together in chronological order. If I don't like what I see, then I will not grade your exam until you fix it (this includes legibility). No late homework will be accepted. To compensate for emergencies, the lowest homework grade will be dropped at the end of the semester.

Testing

This is your opportunity to demonstrate what you have mastered. I will be offering test taking and study strategies frequently. This will be better detailed as the course progresses. I may on occasion give an in class quiz which will count towards your assignments grade.

There will be three midterms, a final. There is a cumulative common final exam which will be held on Wednesday, May 17 at 4:30–6:30 P.M. There will not be any make up exams for any reason (excluding religious reasons).

Academic Dishonesty

Cheating will be dealt with as prescribed by the current CSUCI catalog.

Basis of Grading

- Grade Constitution:

| Component | Percent |
|-------------------|---------|
| Final Examination | 25% |
| Midterms | 50% |
| Assignments | 25% |

- Grades will be distributed as follows:

| | |
|---------|---|
| 90–100% | A |
| 80–89% | B |
| 70–79% | C |
| 60–69% | D |
| 0–59% | F |

I may also use +/– grades.

Students with Disabilities and Student Athletes

Present me with the proper paperwork and the appropriate accommodations will be made accordingly. It will be your responsibility to make necessary arrangements in advance.

Class Conduct

There should be no talking during the class discussion. Any student who persists in this will be asked to leave the class. Punctuality is expected. Arriving late is distracting to other students. On the rare occasion that you arrive late to class, enter the room quietly and find the seat nearest the door. Have cellular phones, pagers, music players deactivated at all times. Please treat all of your colleagues with dignity and respect at all times. If you have any other questions or concerns please inquire.

Course Objectives

We plan to cover the following topics:

- Systems of Linear Equations.
- Determinants.
- General Vector Spaces.
- Inner Product Spaces.
- Eigenvalues and Eigenvectors.

- Linear Transformations.

If time allows, we shall also see:

- Complex Vector Spaces.

Final Note

This syllabus is subject to further change as the semester progresses.