

Course Title: Elements of Linear Algebra

Instructor: Dr. Pete Goetz

Office: BSS 358

Office Hours: Monday (4-5, BSS 308), Tuesday (4-5, BSS 308), Wednesday (4-5, BSS 358), Thursday (8 - 9, BSS 358), Friday (4-5, BSS 358)

Contact Information: pdg11@humboldt.edu; (707) 826-3926

Lecture: MWF 9:00am - 9:50am ArtA 027 CRN 22906

Course Website: <http://users.humboldt.edu/pgoetz/241.htm>

Course Description: Linear systems, matrices, determinants, linear independence, bases, eigenvalues and eigenvectors, and applications. We will cover selected sections from chapters 1 through 6.

Pre-requisite or Co-requisite: Math 205 or Math 210.

Required Text: David C. Lay, *Linear Algebra and its applications* (4th ed.), Addison-Wesley.

Recommended Text: David C. Lay, *Student Study Guide for Linear Algebra and its applications*, ISBN-10: 0321388836, Addison-Wesley

Calculators: Although not required, I strongly encourage you to get a calculator that can do matrix computations for this course. Some of the calculations in linear algebra can be tedious. Additionally, some of the homework questions will be easier if you have a calculator that can row reduce a matrix. The TI-83 and TI-89 calculators are good choices. I would **never** suggest that a calculator be used to replace understanding a topic. Rather, a calculator can **deepen your understanding of a mathematical idea**. Please note that **calculator usage will be limited on all quizzes and exams**.

Homework: Homework will be collected in class, once a week, on Wednesdays. I will make the assignment in class and will also post the problem sets on the course website. **I will not accept any late homework, for any reason whatsoever, so do not request that I do so.** If you know in advance that you will have to miss class, you may make arrangements to turn in your assignment early. **Please be aware that the homework for this class will take a great deal of time and effort, and therefore I advise you begin working on an assignment as soon as it is made.** As in all mathematics classes, the topics we cover will build on each other, and consequently, getting behind on homework assignments can create an enormous amount of difficulty in digesting the newer topics. Questions about homework problems should be addressed during my office hours. **Your lowest two homework scores will be dropped before I calculate your final course grade.**

Quizzes: These will be given promptly at 9:10am on most Fridays. The quizzes will be timed (10 minutes typically). I will tell you in class, several days prior to the quiz, which section(s) you will need to study to prepare for the quizzes. It is your responsibility to make sure you attend the Friday lecture to take the quizzes on time; **very few exceptions will be made for make-up quizzes. Your lowest two quiz scores will be dropped before I calculate your final course grade.**

Exams: We will have three in-class exams during the semester, in addition to a **cumulative final examination**. Please see below for the dates and times of the examinations. You should mark these dates in your calendar now, and plan accordingly, as **all exams will be given only at the scheduled times below, no exceptions (so don't ask)**. Your lowest exam score will count for 10% of your overall grade; your two highest exams will count for 40% of your overall grade.

Exam Dates:

Exam 1	Monday	February 13
Exam 2	Friday	March 23
Exam 3	Friday	April 27
Final	Wednesday	May 9 (8:00 am - 9:50 am)

Weighted Grading Components:

Homework:	15%	A	$92\% \leq \text{your total} \leq 100\%$
Quizzes:	10%	A-	$90\% \leq \text{your total} < 92\%$
Lowest Exam Score:	10%	B+	$87\% \leq \text{your total} < 90\%$
Middle Exam Score:	20%	B	$82\% \leq \text{your total} < 87\%$
High Exam Score:	20%	B-	$80\% \leq \text{your total} < 82\%$
Final Exam:	25%	C+	$77\% \leq \text{your total} < 80\%$
		C	$68\% \leq \text{your total} < 77\%$
		C-	$64\% \leq \text{your total} < 68\%$
		D	$55\% \leq \text{your total} < 64\%$
		F	$0\% \leq \text{your total} < 55\%$

Some advice:

- **Read your text.** The lectures are only a **tiny** amount of the time required to master the material in this course. To be successful, you must read the material in your text ahead of the lecture and repeatedly. You must discuss it with me and/or your colleagues, so that you can fully digest the ideas.
- Work daily and discuss your work with your colleagues. Mathematics **is** a social subject, but it **is not** a spectator sport. Keeping up with the daily assignments is really the best (the only!) way to learn the mathematics. In general, it is expected that students will spend three to four hours working on the material outside of class for each hour that we meet in class.
- Make review sheets of key concepts. The act of preparing these review sheets will help you to build a solid foundation for learning and remembering the key ideas of the course.
- Have fun and make use of my office hours!

Students With Disabilities: Persons who wish to request disability-related accommodations should contact the Student Disability Resource Center in House 71, 826-4678 (voice) or 826-5392 (TDD). Some accommodations may take up to several weeks to arrange.

Add/Drop policy: Students are responsible for knowing the University policy, procedures, and schedule for dropping or adding classes.

Finally, some comments about what you should expect from me, and what I expect from you in this course. My responsibilities include coming to class prepared to teach you linear algebra, giving clear lectures, assigning carefully chosen homework problems that are relevant to our course and carefully preparing quiz and exam questions that accurately measure your progress in the course. Additionally, I am available to you outside of class for consultation in office hours and by appointment. I also hope to share with you my passion for mathematics, and teaching mathematics!

Likewise, I expect you to come to class motivated to learn the material. This involves keeping up with homework assignments, and seeking additional help, either from me or from the many resources available to you here on campus, before it is too late. I believe that you, as a student, are ultimately responsible for your university education and what you take from it. In particular, I expect that you are committed to taking this course this semester, and you understand that this means that you are required to be here during the class meeting time in order to complete the requirements for the course. It is crucial that we have a mutual respect for one another as members of the University community and that we conduct ourselves accordingly. Here are some links to the University's information on these matters.

Academic honesty: Students are responsible for knowing policy regarding academic honesty:

http://www.humboldt.edu/studentrights/academic_honesty.php

<http://pine.humboldt.edu/registrar/catalog/documents/sections/regulations.pdf>

Attendance and disruptive behavior: Students are responsible for knowing policy regarding attendance and disruptive behavior:

http://www.humboldt.edu/studentrights/attendance_behavior.php

Email Communication: I expect that our email communications will be professional and respectful. In particular, email sent to me should begin with a proper salutation (“Dear Dr. Goetz” will do) and end with your (full) name. Moreover the content of the email should be limited to matters related to our class and written in a style appropriate for communicating with University faculty. I will in turn offer the same courtesy in my communications to you. Failure to comply with these guidelines will result in your mail being ignored without comment. Mail containing offensive or inappropriate content will be forwarded to the office of Student Affairs. Finally, you must allow for sufficient time for a reply to an email. In general, email is not a good form of last minute communication.

Finally, in case of an emergency, you may want to read through the following information as well.

Emergency evacuation: Please review the evacuation plan for the classroom (posted on the orange signs), and review

http://www.humboldt.edu/emergencymgmtprogram/campus_emergency_preparedness.php

for information on campus Emergency Procedures. During an emergency, information can be found campus conditions at: 826-INFO or www.humboldt.edu/emergency

Having said all of that, let’s wish each other good luck for the semester and get down to business! Cheers!