MATH 2210Q-004
Applied Linear Algebra
www.math.uconn.edu/~dgross/math2210s09

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Spring 2009

Meeting: T,TH 9:30 – 10:45 in MSB 215

Office Hours: M 9:30 11:30 and TU 1:30-2:30 and TH 11:00-12:00 or by appointment

Text: Linear Algebra And It's Applications, updated 3rd ed. by David C. Lay, Addison-Wesley

Prerequisite: Math 1132Q (116Q) or 1152Q (136Q)

Note: This course is a prerequisite for Math 2310 (215).

Goals & Expectations: The goal for the semester is to learn, understand and be able to work with the main ideas of linear algebra, including systems of linear equations, matrices, vector spaces (concrete and abstract) and their bases, linear transformations and change of bases matrices, eigenvectors and eigenvalues, various matrix factorizations, and the applications of these ideas. This does not only mean that your should be able to work through a bunch of problems similar to ones seen in the homework. But that you should have the ability to articulate the ideas presented in the course in a clear and coherent manner as well. You should be able to apply the theory in new and imaginative ways. This course will have concrete and abstract components. Being able to explain why something is true will constitute a significant part of the course.

Homework: As I am sure you already know, mathematics is not a spectator's sport. Homework will be assigned daily, although it will not be collected, it is expected to be completed by the next class. You will have e-mail assignments (posted on the course web page after class) that will be due the next class day by 7:00 am. These assignments will be just a few questions based on the reading due for that day - essentially, if you prepare for class by looking over the material in the book that will be discussed in class that day, you will do fine on these email assignments.

Exams: There will be two exams, tentatively scheduled for Tuesday, February 24 and Thursday, April 9. The first exam will cover the first two chapters and the second exam will cover chapters 3 and 4. There will be a comprehensive final exam covering material from chapters 1 through 7 (not all sections will be included). The final is scheduled for Monday, May 4 at 8:00 am. All exams will be closed notes and closed book.

Quizzes and Worksheets: There will be quizzes and worksheets throughout the semester; worksheets are done in groups (and need not be the same groupings each time), quizzes are done individually.

Grading: Two exams (25% each)

Quizzes, Worksheets and Email Assignments (15%)
Final Exam (35%)

TENTATIVE SYLLABUS

Jan. 20 (Tu) – Feb. 5 (Th)	Chapter 1 sections 1-9, except 1.6
Feb. 5 (Th) – Feb. 17 (Tu)	Chapter 2 sections 1-5
Feb. 19 (Th)	Review for Exam 1
Feb. 24 (Tu)	Exam 1
Feb. 26 (Th) – Mar. 5 (Th)	Chapter 3
Mar. 17 (T) – Apr. 2 (Th)	Chapter 4 sections 1-7
Apr. 7 (T)	Review for Exam 2
Apr. 9 (Th)	Exam 2
Apr. 14 (Tu) – Apr. 16 (Th)	Chapter 5 sections 1-4
Apr. 21 (Tu) – Apr. 28 (Tu)	Chapter 6 sections 1-4
Apr. 30 (Th)	Chapter 7, sections 1 and 4
May 4 (Tu)	Final Exam, time 8:00 am

- Classes canceled from Monday, March 9 through Friday, March 13 for Spring Break.

