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FINAL EXAM To be announced

Textbook Linear Algebra and its Applications, David C. Lay, Third Edition, Addison-Wesley, ISBN:0-201-77014-8.

Course Summary This course is both a careful introduction to linear algebra, including its applications, and a transition course from computational courses like calculus to more theoretical courses. You will need to understand definitions and theorems and be able to apply them and, sometimes, to prove theorems. The material in the course will tend to be more mathematically subtle than that encountered in your previous math courses, and will consequently require a significant effort on your part to master.

The course covers Chapters 1 to 6 (possibly 7 too) of the text: systems of linear equations, matrix algebra, determinants, vector spaces, eigenvalues and eigenvectors, orthogonality, and inner product spaces.

Expectations Performance at a high level is expected. At a minimum, this means knowing the material from the prerequisite courses, reading the textbook before lectures, taking notes during lectures, and doing the homework afterward. If you want to pass this class, plan to spend an average of two hours outside the class for every hour in class.

Grading Policy:

1. *Quizzes*: Quizzes will be given each Monday at the end of class. The quiz will be based closely on the homework for each week and should take about 10-15 minutes. There will be no quizzes on the weeks when exams are scheduled. The two lowest of these quiz grades will be dropped; there are *absolutely* no makeups on quizzes even if you are absent from being sick or accident.
2. *Tests*: There will be two examinations during the semester, to be scheduled for two hours in class (on the weeks prescribed on the syllabus). A makeup test will only be given for University-sanctioned reasons, and will require appropriate documentation. (Note that calculators will be allowed for use during the taking of all quizzes and exams.)
3. *Final Exam*: The final will be comprehensive, although there will be a slightly higher emphasis on the material since the second test.

4. *Project*: The project will entail the solving of a given multi-step problem, formally presented. It will probably require a few meetings for your group to find a solution to the problem and to present that solution clearly and coherently. Everyone in the group should be involved in preparing the project. Your group should write up a short essay explaining the problem and the mathematics you used to solve the problem and then discussing the meaning of your solution. More information will be provided when the project is assigned. To facilitate your work on the project, you will be given an account on the Math Dept Computer Lab, so as to have access to a computer algebra package (e.g., Maple or Matlab). If you have access to computing software at some other site, you are quite welcome to do your programming there.

5. *Breakdown of the grading*:

2 Semester examinations	40%
Weekly quizzes	15%
Class project	10%
Final examination	35%

Remark Even though there might be some adjustment at the end of semester, 90% guarantees A , 80% guarantees B , etc.

Department Grading Appeals Policy The Department of Mathematics and Statistics does not tolerate discrimination or harassment on the basis of race, gender, religion, or sexual orientation. If you believe you have been subject to such discrimination or harassment, in this or any other math course, please contact the department. If, for this or any other reason, you believe your grade was assigned incorrectly or capriciously, then appeals may be made to (in order) the instructor, the department chair, the department grading appeals committee, the college grading appeals committee, and the university grading appeals committee.