

Math 341, Elementary Linear Algebra

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Text Book: Linear Algebra and Its Applications, by David C. Lay, Custom Edition for the University of Oregon

Prerequisites: MATH 252. MATH 253 recommended.

Course Content: Vector and matrix algebra; n -dimensional vector spaces; systems of linear equations; linear independence and dimension; linear transformations; rank and nullity; determinants; eigenvalues; inner product spaces; theory of a single linear transformation.

Attendance: If you miss a class it is your responsibility to find out what happened in that class.

Homework: (20%) Will be posted on *Blackboard* weekly. Some (not all) of the assigned problems will be graded. Homework assignments will be collected on **Fridays**. The lowest homework score will be dropped. Students are encouraged to work on homework problems together. However, every one must write up her or his solutions individually.

Important Remark. Late homework will not be accepted.

Quizzes: (15%) There will be two short quizzes on

Monday, October 8 and

Monday, November 19.

They will be based on previous homework assignments.

Midterm: (30%) **Monday, October 29**

Final Exam: (35%)

Remark. Calculators, Mathematica, etc are neither allowed nor needed in exams and quizzes. Students are expected to be able to carry out matrix calculations by hand. You may bring one card 3×5 inches with any formula you wish during the midterm and the final exams.

Tentative Plan: We are going to cover the following sections from the textbook:

1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 1.9

2.1, 2.2, 2.4, 2.5, 2.8, 2.9

3.1, 3.2, 3.3

5.1, 5.2.