

Welcome to Linear Algebra! (Math 211, Spring 2006)

Textbook:

David Lay, [Linear Algebra and Its Applications](#), Addison-Wesley, 3rd edition.

Text Website: www.laylinalgebra.com

Instructor:

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What is linear algebra Simply put, the object of linear algebra is about matrices and systems of linear equations. Topics include systems of linear equations, matrices, determinants, eigenvalues, linear transformations and vector spaces. We will cover the core topics from chapter 1 to 7.

Course Objectives: Upon completion of this course, the student should be able to

1. Demonstrate a knowledge and understanding of the concepts, terminology and techniques of introductory linear algebra.
2. Use these concepts and techniques in applied problem solving and mathematical modeling.
3. Perform computations involving linear systems, matrices, vector spaces and linear transformations.
4. Write clear solutions to mathematical problems, and mathematically rigorous definitions and proofs of basic linear algebra results.

Honor Code

THE HONOR CODE OF OXFORD COLLEGE APPLIES TO ALL WORK SUBMITTED FOR CREDIT IN THIS COURSE. BY YOUR SIGNATURE ON SUCH WORK YOU PLEDGE THAT WORK WAS DONE IN ACCORDANCE WITH RULES STIPULATED ON THE WORK OR IN THIS SYLLABUS.

Class Attendance is mandatory. If you must miss class due to illness or other valid excuse (e.g. athletic event) please send me email with explanation. An inordinate number of absences will be handled in accordance with the College's policy.

Homework Assignments: Assignments, unless otherwise specified by the instructor, are to be completed individually. While students are encouraged to consult each other for ideas for assignments, the solutions should be completed individually. Any help one student gives another should be instructional help only. If the instructor feels that a student has not completed an assignment individually, the instructor may question the student on that assignment. The student should be able to explain how he/she worked the problem and should be able to work similar problems.

Late assignments will not be accepted without permission. If permission is given, the following penalties will be assigned:

- 1 day late: 10% reduction
- 2 days late: 20% reduction
- 3 days late: 30% reduction

- Not accepted after 3 days late.

Exams cannot be made up without prior arrangement with the instructor with the exception of Emergency. The exams are on the Fridays of the following dates: **February 17, March 24, and April 21.**

Evaluation:

- Assignments: 50 %, Exams: 33%, Final: 17%
- 92 - 100% A | 90 - 91% A- | 88 - 89% B+ | 82 - 87% B | 80 - 81% B- | 78 - 79% C+ | 70 - 77% C | 58 - 69 % D | 57 % and below: F

Language and linear algebra.

In practical sense, linear algebra is a language. You must learn this language the same way you learn a foreign language -- with daily work. Linear algebra has a universality that transcends the disciplines that apply it. Another reason is that linear algebra begins to deal with much more abstract notions than you may be used to from calculus.