

## MATH 307 (Matrices and Linear Algebra) Syllabus Spring 2008; Section C

**Location and Time** CARVER 0232, TR 9:30-10:50 AM

**Instructor:** Domenico D'Alessandro

Department of Mathematics

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<http://www.public.iastate.edu/~daless/> (Web page where to find communications for the course and/or course material)

Office Hours: TR 11:00-12:20 (in Carver 440).

**Textbook:** David C. Lay, *Linear Algebra and its Applications*, Third Edition. Addison Wesley.

**Course Content:**

- PART I: *Linear Equations and Matrix Algebra*; Chapters 1 and 2 of book.
- PART II: *Determinants; Vector Spaces*. Chapters 3 and 4 of book.
- PART III: *Eigenvalues and Eigenvectors; Orthogonality and Least Squares*; Chapters 5 and 6 of book

If time permits I will give some notions concerning *Symmetric Matrices and Quadratic Forms* (Chapter 7 of book)

**Tests** There will be **three** one hour-20 minutes exams, in class, during regular hours. Each exam will cover one of the three parts of the course.

**Homework:** Assigned roughly every week. A typical homework assignment consists of 1) A suggested reading highlighting the parts of the book that have been covered in class (and the parts that can be skipped) 2) Some suggested problems for which the answers can be found in the book. 3) Problems for which the solution is not in the book. These problems will have to be handed in on the due date and will be graded. The solutions will be discussed in class.

You are allowed to form **teams** of up to two people to do the homework and to hand in one homework for each team.

**Final Exam:** As scheduled. Final exam is comprehensive but content focuses on definitions and concepts more than on problem solving which is the focus of the tests.

**Grade:** 28/100 HWK, 47/100 Tests, 20/100 Final, 5/100 Attendance and in class Participation. (Lowest Homework score will be dropped), Calculators are not allowed during tests and final exam. Late Homework will not be accepted. If you miss a test and you want to do a make-up test you need: 1) Contact the instructor by e-mail or phone (294-8130) *before* the test takes place 2) Give a justification of your absence (e.g., medical certificate if you are sick). At the end of the semester I will schedule a special 1:20 minutes session for make up-tests. The same rules hold if you are not able to attend the final exam.