

Matrix Methods

APPM 3310

Fall 2009 Syllabus

Course Goals: The course goals are to understand the basic concepts of linear algebra and to be introduced to some aspects of computational techniques used in matrix methods. To accomplish these goals, we will study systems of linear equations and the LU decomposition, vector spaces and subspaces, linear transformations and the fundamental subspaces of a matrix, and eigenvalues and eigenvectors. Matrix decompositions (e.g. LU, QR, SVD, etc.) will play a fundamental role throughout the course. (Prerequisite: Calculus 3, APPM 2350 or MATH 2400 or equivalent)

3310-001: Professor James Meiss Office hours: 10M,1M,11F or by appointment Office: ECOT 236 Phone: 303-492-3731 e-mail: James.Meiss@colorado.edu	3310-002: Professor Congming Li Office hours: 12:30-2 MW or by appointment Office: ECOT 324 Phone: 303-492-4632 e-mail: Congming.Li@colorado.edu
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Text: Applied Linear Algebra , by Peter J. Olver and Chehrzad Shakiban. We will cover most of Chapters 1 through 5, 7, and 8. Additional sections will be covered as time permits. This book is on four-hour/overnight reserve at the Math-Physics Library. Here are [corrections to the first printing](#), however, if you obtain a new book, you will likely have the 2nd printing.

Class Web Site: <<http://amath.colorado.edu/courses/3310>>

Grading: Your course grade will be determined from the two midterms (100 points each), homework (100 points), term project (100 points), and a comprehensive final exam (150 points). *Approximate* grade lines will be

A	90% and above
B	80% and above
C	70% and above
D	60% and above

Any adjustments made to this scale will be in the students' favor.

Exams: There will be two midterm (in-class) exams and a comprehensive final exam. The dates of the midterm exams will be announced in class at least one week ahead of time. There will be **no** make-up exams or early exams. If you are sick during a unit exam, please bring a note from your doctor verifying your illness. The rest of your course work will then determine your course grade.

Homework: To do well in this course come to the lectures and do (and understand) the homework. Ask questions. Homework is due on most Wednesdays at the start of lecture. Late homework will be penalized and will not be accepted after the answers have been posted. Selected problems will be graded. While you are allowed, and encouraged, to work on homework problems with your classmates, the work you turn in to be graded must be your own.

Blue books: Each student is required to purchase **three** 8½"×11" blue books and to turn them in by the second week of class. These will be used for the exams.

Special Accommodations: If you qualify for accommodations because of a disability, please submit to me a letter from Disability Services in a timely manner, so that your needs may be addressed. [Disability Services](#) determines accommodations based on documented disabilities. Contact: 303-492-8671 or Willard 322.

Religious Observances [Campus policy regarding religious observances](#) requires that faculty make every effort to reasonably and fairly deal with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance. In this class, please let your instructor know of any conflict at least two weeks in advance.

Academic Honesty: Students may discuss homework problems with each other. However, all work turned in must be your own. Violation of the [CU Student Honor Code](#) will result in a course grade of F.

Dropping the Course Advice from your advisor and/or the Dean's office is recommended before dropping any course. After October 11, 2006, dropping the course is possible only with a petition approved by the Dean's office.