

APPM 3310

Matrix Methods

MWF 1:00 - 1:50 - Spring 2005

1. Overview :

APPM 3310 is an introduction to the theory and application of linear systems of equations. The course will focus on the theory of vector spaces, inner product spaces, and linear operators, and applications will include approximations of continuous systems, networks, least squares, and linear difference and differential equations, with special emphasis given to matrix factorizations. A key component of the course will be the integration of theory and application.

2. Instructor :

- Dr. Jamison Moeser
- Email : moeser@colorado.edu
- Phone : 303-492-7569
- Office : ECOT 234
- Office hours : TBA
- Course website : <http://amath.colorado.edu/courses/3310/2005Spr>

3. Assistants :

- Chris Kurcz - ECOT 532 - 492-3462 - kurcz@colorado.edu
- Moorea Brega - ECOT 213 - 492-4393 - brega@colorado.edu

4. Grading :

- Homework - 25%
Homework will be collected approximately every 1-2 weeks. A random sample of problems will be graded, and solutions will be

posted in a location TBA. **Late homework will not be accepted under any circumstance.** The homework will reinforce the material from class and is an essential part of the course. Group work is encouraged, but each person must hand in his/her own assignment.

- Two midterm exams - 25% each
The exam dates will be announced at least two weeks in advance. There are no make-up exams. If you miss one exam **for a university sanctioned reason**, your other midterm score will count twice.
- Final exam or project - 25%
Each student will have a choice between a final exam or project. Those students who choose a project must provide me with an outline after the second midterm. For those students electing to take the final, the exam will be cumulative and will take place during the time allotted in the finals period.

5. Textbook :

- *Introduction to Linear Algebra*
Gilbert Strang, Wellesley-Cambridge Press (2003)

The book is available in the bookstore. Most of the reading and homework assignments will be from here, though I may occasionally use handouts.

6. Attendance :

Class will start promptly at 1 PM in ECCR 155.
Please do not arrive late.