

# MATH 2853

## Elementary Linear Algebra

Fall 2004

**Instructor:** Dr. Scott Gordon, 324 Boyd.

**Office Phone:** 770-836-4354.

**E-mail:** Office: sgordon@westga.edu; Home: lsa\_gordon@bellsouth.net.

**Time and Location:** M, W, F 10:00–10:50, 306 Boyd.

**Office Hours:**

M	11:00–12:00, 2:00–3:30*
T	10:00–12:30, 1:30–2:00, 3:00–3:30
W	11:00–12:00, 2:00–3:30*
F	11:00–12:00

(\*2:30–3:30 in 302 Boyd)

If you would like to see me but cannot come during one of these times, please call first or make an appointment.

**Textbook:** *Introductory Linear Algebra with Applications (7th ed.)*, by B. Coleman and D. Hill. We will cover Chapters 1–4 and parts of 5–8.

**Course Description:** Methods of solving systems of linear equations (Gaussian elimination, Gauss-Jordan elimination, Cramer's Rule, least squares solutions), computing issues (counting operations, partial pivoting, ill-conditioned systems), vectors (dot product, projection, linear independence, span, basis and dimension), matrices (properties of matrices, matrix algebra, determinants, eigenvalues and eigenvectors), linear transformations, applications.

**Homework:** I will assign homework exercises after each section. These problems will not be graded, but you may be quizzed on them. I will allow some time during class to discuss the problems and I encourage you to use my office hours if you have any questions about them.

**Tests:** There will be a test roughly every four weeks, four in all, worth 80 points each. (See schedule below for test dates.)

**Quizzes:** There will be eight 30-minute quizzes, worth 30 points each, consisting of problems from homework. (See schedule below for quiz dates.)

**Make-up Tests and Quizzes:** In order to be allowed to make up a missed quiz or test, you must (i) have a valid reason for being unable to take the test, (ii) contact me as soon as possible (preferably well in advance of the test) to arrange a make-up, and (iii) be able (except in extreme circumstances) to take the test or quiz on or before the day of the next class. No student will be allowed more than two make-ups during the semester.

**Grading Errors:** In order to have a grade changed as a result of a grading error, you must bring the error to my attention within one week of the time you received the graded test or quiz.

**Final:** A *cumulative* final exam worth 200 points will be given from 8:00–10:00AM on Friday, 12/17.

**Grading:** Your numerical grade will be your total points (on quizzes, tests, and the final) as a percentage of the total number of possible points (760). Your letter grade will be determined according the following grading scale: A: 86–100, B: 72–85, C: 58–71, D: 44–57, F: 0–43.

**Withdrawal:** October 14 is the last day to withdraw from the course with a grade of W.

**First Homework Assignment:** p.8 #1, 3, 5, 7, 21, 22, 25, 27, T.4.

### Testing Schedule

9/1	Quiz 1	10/25	Quiz 5
9/15	Quiz 2	11/3	Quiz 6
9/17	Test 1	11/8	Test 3
9/29	Quiz 3	11/19	Quiz 7
10/8	Quiz 4	12/6	Quiz 8
10/13	Test 2	12/8	Test 4

**Academic Dishonesty Policy:** Any student who engages in any form of academic dishonesty will receive an F for the course. The incident will also be reported to the Office of Student Affairs so that they can determine if further disciplinary action is warranted. Academic dishonesty is defined as one or more of the following:

1. Use of unauthorized information during a test or exam.
2. Copying material from another student's paper during a test or exam.
3. Giving or receiving information during a test or exam.
4. Giving information about the content of a test or exam to a student who will be taking the test at a later time.
5. Obtaining unauthorized information about the content of a test or exam before taking it.