

## Math 2853-01 Elementary Linear Algebra Fall 2015

**Instructor:** Dr. David Leach  
**Location:** 301 Boyd  
**Time:** MWF 10:00-10:52  
**Office:** 317 Boyd  
**Phone:** (678)-839-4127  
**email:** cleach@westga.edu  
**Textbook:** *Introductory Linear Algebra: An Applied First Course, 8th edition*, by Kolman and Hill.

**Learning Outcomes:** Upon successful completion of the course, the student will

1. be able to express linear systems of equations in matrix form.
2. be able to solve systems of linear equations using Gauss-Jordan elimination.
3. be able to perform basic matrix operations and compute matrix inverses and determinants.
4. be introduced to the basic properties of real vector spaces and subspaces including properties such as linear independence, span, basis, rank.
5. examine linear transformations and their applications to computer graphics.
6. be able to compute eigenvalues and eigenvectors of a square matrix.

**Grading and Evaluation:** There will be four in-class tests worth 100 points each; a number of assignments or quizzes that will be averaged together into a score out of 100 points; and a comprehensive final exam worth 150 points. *Tentative* test dates are September 18, October 9, November 2, and November 20. Your average will be computed by adding your three best tests, assignment average, and final exam, dividing by 5.5, and rounding to the nearest whole number. Letter grades are assigned as follows:

90-100: A      80-89: B      70-79: C      60-69: D      0-59: F

**Homework and Attendance:** You are expected to attend every class. Although absences are not formally penalized, if a class is missed, you are responsible for all materials and assignments. Homework will be assigned most days. You should expect to spend approximately six hours outside of class each week working on this course.

**Make-ups:** In order to take a make-up test, you must have a valid reason for missing the test, contact me as soon as possible, and if at all possible take the test on or before the day of the next class.

**Late Assignments:** Due to abuses in the past, I will only accept one unexcused late assignment from each student throughout the semester. Late assignments will be penalized 10% per class day; no assignment will be accepted more than two class days after the due date. I may make an exception to this policy if you have extreme circumstances (e.g. hospitalization or extended documented illness).

**Calculators:** You'll need a matrix calculator such as a TI-83 or 84. You may use a matrix calculator other than a TI (such as a Casio or HP) but I won't be able to help you with it. I may require you to clear the memory before each test. You can't use a calculator app on a smartphone.

**Other Course Policies:** Other course policies, including information regarding students with disabilities and the UWG Honor Code can be found at <http://tinyurl.com/UWGSyllabusPolicies>. You should read this at the beginning of each semester.

### Important Dates:

**Last Day to Withdraw:** Oct 14  
**Thanksgiving Break:** Nov 23-27  
**Final Exam:** Wed Dec 9, 8:00-10:30 am

## Dr. Leach Fall 2015

	MON	TUE	WED	THU	FRI	
8:00 AM						
8:30 AM						
9:00 AM	Office Hour	Research	Office Hour	1113	Office Hour	
9:30 AM						
10:00 AM	2853			2853		2853
10:30 AM						
11:00 AM	2853		2853	Office Hour	2853	
11:30 AM						
12:00 PM	Lunch	Lunch	Lunch	Lunch	Lunch	
12:30 PM						
1:00 PM	1113	Research	1113	Office Hour	1113	
1:30 PM						
2:00 PM	Office Hour			Office Hour	Office Hour	
2:30 PM						
3:00 PM					Gym	
3:30 PM						
4:00 PM	Gym		Gym			
4:30 PM						

Office Hours are also available by appointment