

Math 2853-02 Elementary Linear Algebra Fall 2019

Instructor: Dr. David Leach
Location: 306 Boyd
Time: MWF 11:00-11:50
Office: 317 Boyd
Office Hours: See CourseDen
Phone: (678)-839-4127
email: cleach@westga.edu
Textbook: *Linear Algebra and its Applications, 5th edition*, by Lay, Lay, and McDonald.

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 Fri Sept 13, Wed Oct 2, Mon Oct 28, and Wed Nov 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

MyOpenMath: Some of the assignments will be done using MyOpenMath. You will need to create an account there. It is free.

courseID: 53303

Enrollment key: LeachLinAlg

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.

Available Help: There are many opportunities on campus available to help you succeed in this course.

- **Math Tutoring Center:** Free walk-in help. Room 205 Boyd.
- **One-on-one Tutoring:** Free one-on-one tutoring by appointment in the Center for Academic Success.

CourseDen: You should check courseDen every class day. Assignments will be posted there, and I plan to post my lecture notes there after each class.

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 https://www.westga.edu/academics/assets/docs/Common_Language_for_Course_Syllabi.pdf. You should read this at the beginning of each semester.

Important Dates:

Last Day to Withdraw: Oct 9
Fall Break: Oct 3-4
Thanksgiving Break: Nov 25-29
Final Exam: Fri Dec 13, 11:00-1:00 pm