Syllabus

MATH 2853: Elementary Linear Algebra

Spring 2020

Instructor: Dr. N. S. Hoang Email: nhoang@westga.edu

Office: Boyd 324 Office phone: 678-839-5336.

Office hours: TBA.

Class meeting time: MWF: 11:00 AM – 11:50 AM. **Class room:** Boyd 306

Prerequisites: MATH 1634 or MATH 1501.

Text: *Elementary Linear Algebra*, Ron Larson, Brooks Cole; 7 edition (January 1, 2012). ISBN 978-1133110873.

Description: A concrete, applied approach to matrix theory and linear algebra. Topics include matrices and their connection to systems of linear equations, Gauss–Jordan elimination, linear transformations, eigenvalues, and diagonalization. The use of mathematical software is a component of the course.

Grading: Grades are based on a total of 700 pts given as follows

Total	Homework	Exam 1	Exam 2	Exam 3	Final Exam
700 pts	200 pts	100 pts	100 pts	100 pts	200 pts

Grading scale: A: 90-100%; B: 80-89%; C: 70-79%; D:60-69%; F:0-59%.

Exams: There are three midterm exams given on February 3, March 2, and April 6. Final exam is scheduled on Friday, May 1, 11:00 am-1:00 pm and is a comprehensive exam.

Attendance: Attendance is expected and required. You are responsible for all material covered in class and all announcements made.

Common Language for Course Syllabi: Students, please carefully review the following information at the link *http://tinyurl.com/UWGSyllabusPolicies*. It contains important material pertaining to your rights and responsibilities in this class. Because these statements are updated as federal, state, university, and accreditation standards change, you should review the information each semester.

Withdrawal Policy: The deadline for an automatic W withdrawal is: Feb 28. For more information about withdrawal policy, please read the information at the link

http://www.westga.edu/registrar/

Make-Up Work: There are NO make-up grades for ANY reason. Students having an unexcused absence on the day of a graded assignment will receive a grade of zero for that assignment. Students having an excused absence on the day of a test will have their test average entered for the missed grade. Absences must be excused before they occur except in extraordinary cases, such as active military duty, jury duty, or hospitalization. Being sick, short of being hospitalized, is not an excuse. If you anticipate being absent from class for a religious holiday, it is your responsibility to notify me in advance.

Learning Outcomes: The student will be able:

- to solve systems of linear equations using Gauss–Jordan elimination.
- to perform basic matrix operations and compute matrix inverses and determinants.
- to compute the dot product, length, inner product and norm of vectors in $\mathbb{R}^n$.
- to compute eigenvalues and eigenvectors of a square matrix.
- to use software package MAPLE to perform basic matrix operations.