THE UNIVERSITY OF TEXAS AT EL PASO
COLLEGE OF SCIENCE
DEPARTMENT OF MATHEMATICS

Course #: MATH 5330 (CRN 18640)
Course Title: Computational Methods of Linear Algebra
Credit Hrs: 3
Term: Fall 2022
Course Meetings & Location: TR 10:30-11:50, EDUC 108
Prerequisite Courses: MATH 3323 or MATH 4326
Course Fee: (if applicable) None
Instructor: Granville Sewell
Office Location: Bell 200
Contact Info: Phone # 747-6762
E-mail address sewell@utep.edu
Fax # 747-6502
Emergency Contact
Office Hrs: TW 13:00-14:00
Textbook(s), Materials:
Suggested: Students will

Course Objectives (Learning Outcomes):

a. Become familiar with some of the more popular numerical algorithms for solving linear systems of equations, eigenvalue problems, linear least squares problems, and linear programming problems.

b. Gain experience writing computer programs to implement some of these algorithms.

c. Learn how to determine the complexity of these algorithms, that is, the asymptotic dependence of computer time on matrix size.

d. Learn how to anticipate and control roundoff errors associated with these algorithms.

Course Activities/Assignments: There will be homework assigned regularly, which will include computer (MATLAB or FORTRAN) projects.

Assessment of Course Objectives: Grades will be based on homework and exams, details are at the class website, www.math.utep.edu/Faculty/sewell/5330/5330j.htm

Course Schedule: Complete homework and test schedule is given at the class website, www.math.utep.edu/Faculty/sewell/5330/5330j.htm

Grading Policy: 40% based on homework, 60% based on two tests and a final. Details are at course website, www.math.utep.edu/Faculty/sewell/5330/5330j.htm

Make-up Policy: Late homework not accepted. Make up tests will be given for excused absences.

Attendance Policy: None


Civility Statement: None
Disability Statement: If a student has or suspects she/he has a disability and needs an accommodation, he/she should contact the CASS at 747-5148 or at <cass@utep.edu> or go to Room 106 Union East Building. The student is responsible for presenting to the instructor any DSS accommodation letters and instructions.

Military Statement: