

MATH 344 Section 002 & 003
Applied Linear Algebra
Fall 2024

COURSE INFORMATION

Instructor. Dr. Changhui Tan

Lectures. Section 002: Tu Th 11:40 am - 12:55 pm, at Close-Hipp 351
Section 003: Tu Th 2:50 pm - 4:05 pm, at Close-Hipp 350

Office. LeConte 427

Email. tan@math.sc.edu (best method of contact!)

Office Hours. T Th 10:00 am - 11:00 am, or by appointment

COURSE DESCRIPTION AND OBJECTIVES

Prerequisites. C or better in MATH 142; or consent of the Undergraduate Director.

Course Webpage. <https://www.changhuitan.com/teaching/usc/344f24>

Textbook. GILBERT STRANG, *Introduction to Linear Algebra (6th edition)*, Wellesley Cambridge Press, 2023. (ISBN: 978-17331466-7-8)

Subject Materials. We shall cover most of the material presented in Chapters 1-7 of the textbook.

Learning Outcomes. Students are expected to master fundamental concepts in linear algebra, such as vectors, subspaces, determinants, eigenvalues and eigenvectors of matrices, etc. and utilize these concepts and numerical implementation learned from this course to solve problems in context.

COURSE POLICIES AND EXPECTATIONS

Attendance. Attendance at every class meeting is important, and expected. Constantly missing lectures will lower your final grades. All absences due to documented illness will be excused, and no grade penalty will be assessed for missing classes for this reason. Students are responsible to inform the instructor in advance.

Homework. Homework will be assigned after each lecture. We do not plan to collect homework. But you are supposed to do them all.

REMEMBER: the more problems you do, the better you understand the material.

The homework is not pledged. You are encouraged to discuss the problems. However, each student is responsible for the final preparation of his/her own homework papers.

Quizzes. There will be approximately one quiz per week on Tuesday (occasionally on Thursday), in the final 15 minutes of the lecture. The quiz problems will be either the same as, or very similar to those from the homework. Thus, if a student has made a good attempt at the homework, he/she should do well on the quiz. The lowest quiz grade will be dropped from the final grade calculation.

Exams. There will be two 75 minutes midterm exam, and a 150 minutes cumulative final exam. The tentative dates for the exams are:

Midterm Exam #1: Tuesday, September 24th, in class.

Midterm Exam #2: Thursday, November 7th, in class.

Final Exam: Thursday, December 12th, 12:30 - 3:00 pm (002), 4:00 - 6:30 pm (003).

Any change on the date will be informed at least 10 days prior to the old and new dates, whichever is earlier.

Late Policy. Late work will not be accepted. If a religious holiday or a mandatory university event conflicts with a homework assignment or exam, I must be informed at least one week in advance. If there is a documentable emergency, please contact me, as soon as possible, to arrange a meeting to discuss the situation. There will be no make-up quizzes and exams without documentation of a university approved excuse.

Grades. Here is the distribution for calculating the final score in the course:

Quizzes	20% (drop lowest)
Midterm Exams	20% each
Final Exam	40%

You can monitor your grades via Blackboard. The letter grade will be generated by

90-100	86-89	80-85	76-79	70-75	66-69	60-65	0-59
A	B+	B	C+	C	D+	D	F

Diversity and Inclusion. The university is committed to a campus environment that is inclusive, safe, and respectful for all persons, and one that fully embraces the Carolinian Creed. To that end, all course activities will be conducted in an atmosphere of friendly participation and interaction among colleagues, recognizing and appreciating the unique experiences, background, and point of view each student brings. You are expected at all times to apply the highest academic standards to this course and to treat others with dignity and respect.

Disclaimer: The instructor reserves the right to make changes to this syllabus without prior notice. However, once changes are made you will be notified of those changes.