Math 2700.005 – Linear Algebra and Vector Geometry – Fall 2025

Place: Chilton Hall 245 (Chil 245)
Time: TuTh 5:00PM - 6:20PM

Instructor Contact

Name: Giordano Tierra Chica
Office Location: General Academic Building 471A
Office Hours: TuTh 2:00PM - 3:45PM
Email: gtierra@unt.edu
Communication Expectations: The communication in this course will be through Canvas and email (only from UNT accounts).

Course Description

We will discuss material related to the following topics as time permits: linear equations, matrix algebra, determinants, vector spaces, eigenvalues and eigenvectors, and orthogonality.

Course Structure

This is a face to face course.

Course Prerequisites or Other Restrictions

Students must complete MATH 1720 with a C or better or be in math placement group MTH5 to enroll in this course.

Course Objectives

To help students learn basic concepts, techniques, and applications of Linear Algebra and Vector Geometry.

Materials

Linear Algebra and Its Applications
David Lay, Stephen Lay, Judi McDonald
Pearson, 6th edition (ISBN-13: 9780135851258)

Course Technology & Skills

Minimum Technology Requirements

You will need some electronic device that allows you to check Canvas, to read emails and to submit homework in digital form.

Computer Skills & Digital Literacy

Using Canvas and scanning documents (this can be done using a smartphone).

Course Requirements

Assignment	***Points Possible***	***Percentage of Final Grade***
Homework	*100 points*	*25%*
Exam I	*100 points*	*25%*
Exam II	*100 points*	*25%*
Final Exam	*100 points*	*25%*

Course Schedule (tentative)

Week I to week V (from 08/19 to 09/16): Linear Equation + Matrix Algebra
Week VI to week X (from 09/23 to 10/21): Matrix Algebra+ Determinants + Vector Spaces
Week XI to week XV (from 10/28 to 12/02): Eigenvalues/Eigenvectors + Orthogonality
Last day of class (12/04): Review

Exam Dates

Exam I: Thursday 18th September
Exam II: Thursday 23rd October
Final Exam: Tuesday 9th Dec, 4:00PM - 6:00PM

Grading

A = [100,90], B = (90,80], C = (80,70], D = (70,60], F = (60, 0].

Course Policies

Attendance

Attendance is strongly recommended but not required. Students will need the lecture notes in order to prepare for the exams. The textbook by itself is not a suitable resource for exam preparation, since the lecture notes are not exactly the same as the material in the textbook, and the textbook contains much more material than is needed for exam preparation. Important information and announcements are oftentimes made during class time, and students are responsible for that information. Students who miss class have the responsibility to check the lectures notes and learn about any class announcements.

Homework

Homework will be submitted electronically via Canvas. "Naked numbers are not acceptable." Solutions must include a short write-up describing the problem, your solution technique, and procedural details. All things must be clearly labeled with your name and the problem number or statement. Hand written work must include the steps for solution presented in a neat orderly fashion and in a fairly large size.

Late Work

Late work is unacceptable. No make-ups.

Attendance and Performance

While attendance and performance is expected as outlined above, please contact me if you are unable to attend class or meet course deadlines due to documented emergencies (sickness, car accident, a death in the family, etc.). It is important that you communicate with me prior to skip deadlines so I may

make a decision about accommodating your request to get extensions on the deadlines and/or preparing make-ups.

Prohibited use of Generative AI

In this course, I want you to engage deeply with the materials and develop your own critical thinking. For this reason, the use of Generative AI (GenAI) tools is not permitted. While these tools can be helpful in some contexts, they do not align with our goal of fostering the development of your independent thinking. Using GenAI to complete any part of an assignment, exam, or coursework will be considered a violation of academic integrity, as it prevents the development of your own skills, and will be addressed according to the Student Academic Integrity policy.

Welcome to UNT!

As members of the UNT community, we have all made a commitment to be part of an institution that respects and values the identities of the students and employees with whom we interact. UNT does not tolerate identity-based discrimination, harassment, and retaliation. UNT's full Non-Discrimination Policy can be found in the UNT Policies section of the syllabus.

Rules of Engagement

Rules of engagement refer to the way students are expected to interact with each other and with their instructors. See these Engagement Guidelines (https://clear.unt.edu/online-communication-tips) for more information.

Online Course System

The University is committed to providing a reliable online course system to all users. However, part of working in the online environment involves dealing with the inconveniences and frustration that can arise when technology breaks down or does not perform as expected. Here at UNT we have a Student Help Desk that you can contact for help with Canvas or other technology issues.

UIT Help Desk: UIT Student Help Desk site (https://www.unt.edu/helpdesk)
Email: helpdesk@unt.edu
Phone: 940-565-2324
In Person: Sage Hall, Room 130
Walk-In Availability: 8am-9pm
Telephone Availability:

- Sunday: noon-midnight
- Monday-Thursday: 8am-midnight
- Friday: 8am-8pm
- Saturday: 9am-5pm

Laptop Checkout: 8am-7pm

For additional support, visit Canvas Technical Help (https://community.canvaslms.com/docs/DOC-10554-4212710328)