

M f340L
Matrices and Matrix Calculations
Summer 2024, First Session – Unique ID 85470

Instructor: Dr. Kirk Blazek

Lecture: MTWThF 10-11:15 in CPE 2.208, <https://utexas.zoom.us/j/98673652176>

Office: PMA 13.140

Email: blazek@math.utexas.edu

TA: Aru Mukherjea

TA Email: amukherj@utexas.edu

Catalog Description: Techniques of matrix calculations and applications of linear algebra.

Prerequisites: Mathematics 408C, 408K, or 408N with a grade of at least C-.

Text: Lay, *Linear Algebra and its applications*, 5th Edition, Addison Wesley.

Lectures: Lectures will be held Monday through Friday in CPE 2.208. While lecture is being given in this room, it will also be broadcast through Zoom. You are welcome to either attend in person or remotely through Zoom. I will do my best to monitor chat in Zoom to field any questions that arise during the live lecture from those that are logged in remotely. If you are unable to attend lecture live for any reason, whether in person or through Zoom, the lectures will be recorded and posted to Canvas.

Piazza: Instead of usual live office hours, everyone in class has been invited to a Piazza page where people are welcome to ask questions. It is meant to be a place where questions about the class can be resolved by fellow students, the TA, or the teacher. If you would prefer a more in-person discussion, I'm always happy to stay a bit after the regular class time and ask questions, or you can schedule a time to have a meeting via Zoom.

Homework: Problem sets will be assigned twice a week through Quest, <https://quest.cns.utexas.edu/>. The homework will be due Tuesday and Friday at midnight central time. One homework will be dropped at the end of the class.

Exams: This course will have a midterm and a final. The midterm will be given on Friday, June 21st and the final will be on Friday, July 12th from 9am-noon. The exams will be posted on Gradescope, which will be linked with Canvas. The exams will be available in a relatively large window of time that will overlap the time of lecture, but once you download the test, you will have a limited amount of time to complete the test and upload it. Details will be announced as we get closer to the dates of the exams. The exams will be written as though they could be done in class in the allotted time (an hour and fifteen minutes for the midterm, three hours for the final), and you will be given extra time to allow for any technical issues that may arise. No late submissions will be accepted, so it is important to submit your solutions well before the deadline in case you run into any technical issues. If by some chance you run into problems with Gradescope, it is important to contact me *immediately*, preferably with a copy of your completed test attached to your email.

Emergencies: If an emergency situation comes up that will result in you being unable to turn in an assignment or exam, please let me know as soon as possible so we can try to work something out.

Sharing of Course Materials is Prohibited: No materials used in this class, including, but not limited to, lecture hand-outs, videos, assessments (quizzes, exams, papers, projects, homework assignments), in-class materials, review sheets, and additional problem sets, may be shared online or with anyone outside of the class unless you have my explicit, written permission. Unauthorized sharing of materials promotes

cheating. It is a violation of the University's Student Honor Code and an act of academic dishonesty. I am well aware of the sites used for sharing materials, and any materials found online that are associated with you, or any suspected unauthorized sharing of materials, will be reported to Student Conduct and Academic Integrity in the Office of the Dean of Students. These reports can result in sanctions, including failure in the course.

Class Recordings: Class recordings are reserved only for students in this class for educational purposes and are protected under FERPA. The recordings should not be shared outside the class in any form. Violation of this restriction by a student could lead to Student Misconduct proceedings.

Grading: This class is graded on the +/- scale. The overall grade will be determined by the given during the class as well as well as the quizzes.

An A will be given for an overall grade of 93 and up, an A- is given for 90-93, a B+ for 87-90, a B for 83-87, a B- for 80-83, etc. Please note that since the grade ranges for most of the grades are 3 or 4 points, there is not much rounding (e.g., an 86.5 is still a B, but an 86.95 will round to a B+).

30%	Midterm
40%	Final Exam
30%	Homework
100%	Total

Honor Code: The core values of the University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

Students with Disabilities: If you are a student with a disability, or think you may have a disability, please contact Disability and Access (D&A) to determine your eligibility for accommodations. You may refer to D&A's website for contact and more information. If you are already registered with D&A, please deliver your accommodation letter to me as early as possible so we can discuss your approved accommodations.

Schedule (Subject to Change):

Week 1: Sections 1.1-1.3

Week 2: Sections 1.4,1.5,1.7,1.8,2.1-2.3

Week 3: Sections 2.4,2.5,2.8,2.9,3.1,3.2

– Midterm Friday, June 21st

Week 4: Sections 4.1-4.7

Week 5: Sections 5.1-5.7

Week 6: Sections 6.1-6.5

– Final Exam Friday, July 12th from 9am-noon