DSCI 369–Section 004 Linear Algebra **Colorado State University**
Online **Spring Semester, 2025**

COURSE SYLLABUS

Instructor: Jake Kettinger (`jkett@colostate.edu`)

Text: *Linear Data: How linear algebra informs us*, by Emily King and James Wilson (A link to the textbook will be provided on Canvas.)

Course Description and Objectives: Linear algebra is one of the most important and fundamental subjects in mathematics: virtually every area of mathematics uses the tools of linear algebra. Linear algebra also has applications in scientific computation, engineering, and statistical models in the social sciences. This course provides an introduction to the ideas and methods of linear algebra, which you will learn by understanding them geometrically and justifying them algebraically. Upon the completion of this course, you will learn:

- Solving systems of questions
- Matrices
- Vector spaces/linear maps
- Spectral Theory

Contact Information: The best way to contact with me is by **email**, `jkett@colostate.edu`. Please put "[DSCI 369]" at the beginning of the subject and include your whole name in your email. Using your official CSU email to contact me is strongly recommended. You are welcome to stop by during my office hours. If you want to meet at another time, please email me in advance, and we will try to schedule a time to meet.

Homework: There will be six homeworks: one every other module. At the end of the semester there will be an optional 7th homework that can replace your lowest homework score. Late work will not be accepted. Collaboration on homework is allowed and in fact encouraged, but you MUST write your own solutions.

Labs: Every Module will have be a coding lab where we will explore the concepts learned in lecture through Matlab. Students should bring their laptop/tablet to class that day. The lowest 2 lab scores will be dropped. No late labs will be accepted. Collaboration during labs is allowed and in fact encouraged, but you MUST type/program/compile your own solutions.

Exams: We will have 2 Midterm Exams and a Final Exam. Make-up Exams will only be given with written evidence of an official University excused absence. If you know in advance you will be unable to take an Exam due to a University excused absence, please notify the instructor as early as possible. Failure to show up for an Exam or to notify the instructor in advance of an absence can yield a score of zero.

Grading: Online Homework totals to 20%, Labs total to 20%, Midterm Exam I 20%, Midterm Exam II 20%, and Final Exam 20%. Below is the **maximum** percentage required to get a particular letter grade. That is, I may lower these percentages, but I will not raise them.

Percentage	97	90	87	84	80	77	74	70	67
Letter Grade	A+	A	A–	B+	B	B–	C+	C	D

Special Dates:

January 24 (Friday):	End restricted drop.
February 28 (Friday):	Exam 1.
March 15–23:	Spring Recess (No Classes)
April 18 (Friday):	End Course Withdrawal ("W") Period, Repeat/Repair Deadline.
April 18 (Friday):	Exam 2.
May 14 (Tuesday):	Final Exam

Academic Integrity: Academic honesty is essential to the existence and integrity of an academic institution. The responsibility for maintaining that integrity is shared by all members of the academic community. The University's Student Code of Conduct addresses academic misconduct. Students who commit acts of academic misconduct are subject to disciplinary action and are granted due process and the right to appeal any decision.

Departmental Grading Appeals Policy: Students who believe their academic evaluation has been prejudiced or capricious have recourse for appeals to (in order) the instructor, the departmental chair, the departmental appeals committee, and the college appeals committee.

Services for Students with Disabilities: The University strives to make all learning experiences as accessible as possible. If you anticipate or experience barriers based on your disability (including mental health, chronic or temporary medical conditions), please let me know immediately so that we can discuss options privately. To establish reasonable accommodations, I may request that you register with Student Disability Center (SDC). If you are eligible for services and register with their office, make arrangements with me as soon as possible to discuss your accommodations so they can be implemented in a timely manner. SDC contact information: TILT Building, room 121.; (970) 491-6385; `sdc_csu@colostate.edu` .

Student Concerns and Feedback: Your experience in this course is important to me. If you have questions, concerns, or positive feedback, please contact me at `jkett@colostate.edu`. If I am unable to respond, or you feel I have not adequately addressed your concerns, you can contact Alexander Hulpke, `hulpke@colostate.edu`. If your concern is still not resolved, please contact Associate Dean of Undergraduate Affairs Jen Aberle, `jennifer.aberle@colostate.edu`.

Disclaimer: I reserve the right to make changes to the syllabus during the course of the class.