

COURSE DESCRIPTION
LINEAR ALGEBRA
MA 631-2E
FALL 2023

DEPARTMENT OF MATHEMATICS
UNIVERSITY OF ALABAMA AT BIRMINGHAM

Course Instructor: Dr. Carmeliza Navasca

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Preferred Methods of Contact: Email is the preferred method of contact if you have questions. Please expect a response within 24 hours on weekdays and a slower response on weekends (OR Emails received after 5 pm on Friday will be returned Monday morning). Include course number in the subject line of your email for a faster response. I am available to meet with you virtually via Zoom by appointment during my virtual office hours (see below for my scheduled virtual office hours).

Office Hours: TBA

Course Info

Meeting times: Tue/Thu, 2:00–3:15 PM

Credits: 3 semester hours

Required Textbook: (1) *UAB Class Notes: MA 631, Linear Algebra* by multiple UAB math faculty members. Download from Canvas (Required)
(2) S. H. Friedberg, A. J. Insel and L. E. Spence, *Linear Algebra*, Pearson, 5th Ed. (Recommended)
(3) P. Lax, *Linear Algebra and Its Applications*, Wiley, 2nd Ed. (Recommended)

Important Dates

First day of our class: August 22, 2023

Labor Holiday: September 4, 2023

Last day to drop without paying full tuition: August 28, 2023

Fall/Thanksgiving Break: November 20 – November 24, 2023

Last day of our class: November 30, 2023

Midterm Dates: October 12, 2023 and November 30, 2023

Final Exam Date: Tuesday, December 5, 2023

Course Policies

- Please make sure that you are able to receive e-mail through your Blazer-ID account. Official course announcements may be sent to that address.

- If you are contacted by the Early Alert Program, you should consider taking advantage of the services it offers.
- If you wish to request a disability accommodation please contact DSS at 934-4205 or at dss@uab.edu. See below for COVID-19 Temporary Adjustments.

Course Description

Vector spaces; linear transformations and matrices; determinants; systems of linear equations and Gaussian elimination; eigenvalues, eigenvectors and diagonalization; generalized eigenvectors and Jordan decomposition; minimal polynomials, Cayley-Hamilton theorem

Class Management via Canvas

- Homework problems will be posted in canvas (<http://www.uab.edu/online/canvas>). All other materials (class announcements, codes, grades and etc.) will be posted in canvas. Students should log in to canvas everyday.
- Homework assignments, projects and activities will only be collected on canvas.

Assessment Procedures

- Student achievement will be assessed by the following measures:
 - **Weekly homework.** Homework will be assigned on a weekly basis. There will be no extension of deadlines for any reason. Homework contributes 20% to the course average.
 - **Class participation.** Class participation contributes 10% to the course average.
 - **Midterm exams.** The midterm exams contribute 40% to the course average.
 - **Final exam.** The final exam contributes 30% to the course average.

Grading Scheme: 20 % homework, 10 % class participation, 40 % midterms and 30% final

- Your course performance is your course average (including the final exam score). This is a number between 0 and 100.
- Your final grade is determined according to the following table:

Course performance:	88-100	75-87	50-74	below 50
Final Grade:	A	B	C	F

- There will be a group project or activity in this course. Please make sure to check the group project instruction page to locate your group and your group space in Canvas. In this group project activity, you will collaborate with other students on proving theorems. At the end of the collaboration, you will be required to fill out a group self-evaluation form to evaluate other team members' contributions to the project. Team members who did zero contribution will receive a zero grade on the class activity.

Tips

- By working steadily and regularly, you will increase your chances to succeed in this course.
- Remember, being a full-time student is a full-time job.

UAB Policies and Resources

- Non-Academic Student Code of Conduct (<https://www.uab.edu/students/conduct/>)

- DSS Accessibility Statement

Accessible Learning: UAB is committed to providing an accessible learning experience for all students. If you are a student with a disability that qualifies under Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act, and you require accommodations, please contact Disability Support Services for information on accommodations, registration and procedures. Requests for reasonable accommodations involve an interactive process and consist of a collaborative effort among the student, DSS, faculty and staff. If you are registered with Disability Support Services, please contact DSS to discuss accommodations that may be necessary in this course. If you have a disability but have not contacted Disability Support Services, please call (205) 934-4205, visit (<https://www.uab.edu/students/disability/>), or their office located in Hill Student Center Suite 409.

- Title IX Statement

The University of Alabama at Birmingham's committed to providing an environment that is free from sexual misconduct, which includes gender-based assault, harassment, exploitation, dating and domestic violence, stalking, as well as discrimination based on sex, sexual orientation, gender identity, and gender expression. If you have experienced any of the aforementioned conduct we encourage you to report the incident. UAB provides several avenues for reporting. For more information about Title IX, policy, reporting, protections, resources and supports, please visit (<https://www.uab.edu/titleix/>) for UAB's Title IX, UAB's Equal Opportunity, Anti-Harassment, Duty to Report, and Non-Retaliation policies.

Academic Honor Code

The University of Alabama at Birmingham expects all members of its academic community to function according to the highest ethical and professional standards. Academic misconduct undermines the purpose of education. Such behavior is a serious violation of the trust that must exist among faculty and students for a university to nurture intellectual growth and development. Academic dishonesty and misconduct includes, but is not limited to, acts of abetting, cheating, plagiarism, fabrication, and misrepresentation. Candidates are expected to honor the UAB Academic Honor Code as detailed in the most current UAB Student Catalog. Please consult this resource (<https://www.uab.edu/students/one-stop/policies/academic-honor-code>) for additional information regarding the specific procedures to be undertaken when a student violates the UAB Academic Honor Code.

Non-harassment, Hostile Work/Class Environment

The UAB College of Arts and Sciences expects students to treat fellow students, their Course Instructors, other UAB faculty, and staff as adults and with respect. No form of hostile environment or harassment will be tolerated by any student or employee.
