

Intro to Linear Algebra, Honors (MA260/2C) –Fall 2026

Course Information

- **Instructor Name:** Andrea Ottolini
- **Email:** ottolini@uab.edu (please include MA 260 in the subject of any email)
- **Office hours and location:** T-Th 12.30pm-2.30pm University Hall 4039.
- **Meeting times and location:** T-Th 11:00am-12:15pm at HHB 221.
- **Course Description:** Matrices are more than tables of numbers, and vectors are more than arrows in space. In this course, we will abstract these notions to provide the foundation of the general theory known as linear algebra, and we will hint at several applications in math and beyond. The course is worth 4 credits.
- **Required Text and Course Materials:** *Elementary Linear Algebra: Applications Version*, 12th Edition, H. Anton, C. Rorres, A. Kaul. E-Book Comes with UAB First Day Access. We will cover material in the first six chapters.

Tentative schedule

- Week 1, 2, 3: Linear system and matrices, determinant, linear transformations.
Homework 1 due on 1/30/26 at 6.00pm
- Week 4, 5, 6: Vector spaces, linear independence, basis, Euclidean spaces.
Homework 2 due on 2/20/26 at 6.00pm
- Week 7,8: Review, bonus: Markov chains.
Midterm 1 in class on 2/26/26.

Spring break.

- Week 9, 10, 11, 12: Eigenvalues, diagonalization, inner products, spectral theorem.
Homework 3 due on 4/10/26 at 18.00pm
- Week 13, 14: Review, bonus: convergence rates for Markov chains.
Midterm 2 in class on 4/16/26

Grading scheme

In the last week of class, you will be told a proposed grade for the course based on the scheme

- Homework: 30% (10% each).
- Midterms: 70% (35% each).

The day of the final¹, you are given the chance to take a look at the exam and make a decision: walk away or take the final. In the former case, you accept the proposed grade. In the latter case, your new grade will be determined via the scheme

- Homework: 30% (10% each).
- Midterms: 40% (20% each).
- Final: 30%.

Course Time Zone

All assignment deadlines listed on this syllabus are in Central Time. If you are in a different time zone, including any traveling, are responsible for calculating the time difference and submitting assignments or attending online meetings on time. Use the World Official Time Zone Site as a reference.

University Policies and Resources

- **Add/Drop and Withdrawal:** See Academic Calendar and BlazerNET.
- **Academic Integrity:** All work must be your own. Violations will be reported.
- **AI Use:** Unauthorized use of AI tools is considered academic misconduct.
- **Student Conduct Code:** See Office of Community Standards.
- **Accessibility:** Contact DSS at (205) 934-4205 or visit the DSS website.
- **Title IX:** UAB does not discriminate based on gender. See Title IX webpage.
- **Divisive Concepts:** Students are not required to assent to controversial ideas.
- **Violence Prevention:** See UAB's Violence Prevention and Response Policy.
- **Technology:** See Student Learning Technologies website.
- **Health and Safety:** See Student Health Services and B Well app.

¹The final will occur on Tuesday, April 28th, from 10.45am to 1.15pm, location TBD.

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 the Americans with Disabilities Act (ADA) and/or 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 me 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 or visit the DSS website.

Title IX Statement

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