MATH2210QS04 Applied Linear Algebra, Fall 2026

Me: Aurel-**Mihai** Fulger. You may call me Mihai.
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Office hours: Fridays 9-10am in Monteith 323, or by appointment

Course Webpage: See HuskyCT.

Textbook: *Linear Algebra and its Applications* by David C. Lay, Steven R. Lay, Judi J. McDonald, sixth edition, Pearson

It is recommended that you buy this book, but not required. A previous version is acceptable. It is not required that you buy the access code. We will **not** use MyMathLab/WebAssign for homework.

Course Content: Systems of equations, matrices, determinants, linear transformations on vector spaces, characteristic values and vectors, from a computational point of view. The course is an introduction to the techniques of linear algebra with elementary applications.

The minimum material covered will be sections 1.1-1.5, 1.7-1.9, 2.1-2.3, 2.8-2.9, 3.1-3.3, 4.1-4.6, 5.1-5.4, 6.1-6.4 in the book.

At the end of the semester, students are expected to develop the skills necessary to compute row reduced echelon forms by elementary row operations via Gauss elimination, determinants up to size 4×4, and orthogonal bases via the Gram-Schmidt process. They will apply these skills in order to solve linear systems of equations, find bases for images and null spaces of matrices or linear transformations.

Course Organization: Three meetings per week, MWF 12:20-13:10pm in Monteith 419.

Homework: There will be 12 weekly assignments, posted on HuskyCT. The due date will be specified for each, usually the Friday of next week.

Your two lowest homework scores (e.g., from missed assignments) will not count towards your grade.

Homework is the best way to stay up-to-date with the material, and the best indicator for how well you are doing in class at any given moment. I recommend that you try the problems on your own before seeking help from AI, classmates, or from me. **No typed assignments.** This is to avoid copy-paste from AI responses. Hand in your own copy of the assignment. Identical copies are a violation of the expected standard of academic integrity.

To submit an assignment, the preferred method is through HuskyCT, but it is acceptable to e-mail me picture scans of your work. Most smartphones have apps that can scan documents and they look better than pictures, but pictures are also okay if they are legible. Some tablet apps can also help produce beautiful assignments.

Final score and course grade: The components of the **final score** and their weights are as follows:

- Homework 10%
- Midterm 1 30%
- Midterm 2 30%
- Final 30%

If your final score is your best score among tests, I will also use it to replace your lowest midterm score in the final grade computation.

All tests have 10% extra credit built in. For example the point values for problems on Midterm 1 may add up to 11, but 10 would be considered perfect.

The midterms will be administered **in class**. The provisional dates are

1. Wednesday, **October 7th** for **Midterm 1**;
2. Wednesday, **November 4th** for **Midterm 2**.

For any approved CSD extra time, make arrangements to take the test at CSD.

The final will be set **during the finals week**. The precise date and location are determined by the registrar and will be posted on Student Admin.

Your course grades will be curved based on the distribution of final scores, aiming for a B+ median score, with about 50% of the students scoring in the B,B+,A- range. Grades are usually rounded up to produce clear gaps between different grade brackets. 50% of the score is expected to be sufficient for passing.

Students with Disabilities. The Center for Students with Disabilities (CSD) at UConn provides accommodations and services for qualified students with disabilities. If you have a documented disability for which you wish to request academic accommodations and have not contacted the CSD, please do so as soon as possible. Detailed information regarding the accommodations process is available on their website at `www.csd.uconn.edu`.

Academic integrity: The work you do in this course should reflect your honesty and integrity. UConn's complete policy on academic integrity can be found at `http://community.uconn.edu/the-student-code-appendix-a/`.

AI disclosure: You may use AI to assist you with HW assignments. I may use AI to help with improving lecture design, or for a quick start on writing tests/assignments. I will **not** use AI for grading.