

Linear Algebra I
MAS 4105
Fall 2024

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Lecture: Period 4, 10:40am - 11:30am MWF
LIT 225

Text *Linear Algebra Done Wrong* by Sergei Treil.

Course Objectives We will cover core topics in linear algebra, including matrix algebra, vector spaces, linear transformations, concepts of dimension, change of basis, the determinant and eigenvalues/spaces/vectors. Students participating in the class will:

- master computational and theoretical aspects of the aforementioned mathematical topics
- develop mathematical independence and maturity
- develop an appreciation of the value of mathematical abstraction; that sometimes making the beginning of an idea more complicated makes the conclusion **simpler**
- improve their mathematical communication skills, both written and verbal
- work effectively with others to solve challenging problems
- feel valued for their contributions to the class and its environment

These goals will be supported by me and Aaron, but also by you. By participating in this class, I expect your best available effort mathematically, and also in supporting the other members of our classroom community. My goal is that you find this class very rewarding.

If you find yourself doing significantly more than 12 hours a week of work outside of class, something is going wrong. Reach out to me and we can identify strategies so you can use your time more effectively.

Expectations In order to achieve these goals, participants in this course are expected to:

- work collaboratively on work sheets in class
- be respectful of each other
- complete written homework (available in the Assignments section)
- give the best effort they can within the context of their other needs

Additionally, I encourage you all to collaborate extensively outside of class.

Evaluation We will have three main types of evaluation: written homework, quizzes and exams. Homework will include some computational problems, but will mostly focus on developing mathematical communication skills and enhancing understanding of core linear algebra concepts. Quizzes will be brief but frequent to encourage the development of computational skills and consistent effort. Exams will feature computational in-class components and brief take-home portions with a more theoretical focus.

Grading Grades will be assigned according to the following scheme:

Homework	30%
Quizzes	10%
In-Class Midterms	20%
Take-Home Midterms	15%
Final Exam	25%

The final grades will be curved, but will be no tougher than the 10-point scale: 90%-100% will be some form of A, 80-90% will be at least some form of B, etc. After each exam, you will receive a projected grade.

If you have a disagreement with the grading of one of your solutions, I ask that you submit a written request for reconsideration within one month.

Grading will be in accord with the UF policy stated at <https://catalog.ufl.edu/UGRD/academic-regulations/grades-grading-policies/>.

Honor code IUF students are bound by The Honor Pledge which states, We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: On my honor, I have neither given nor received unauthorized aid in doing this assignment. The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor.

Attendance Attendance will not be monitored. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at: <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx>.

Accomodations for students with disabilities Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, <https://www.dso.ufl.edu/drc/>) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Online Evaluations	Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu . Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/ .
Students with Learning Disabilities	Students requesting class and exam accommodations must first register with the Dean of Students Office Disability Resource Center (DRC), www.dso.ufl.edu/drc/ . That office will provide a documentation letter via email to your instructor. This must be done as early as possible in the semester, at least one week before the first exam , so there is adequate time to make proper accommodations.
Complaints	The official UF policy for filing a complaint about the course may be found at https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf .
U Matter, We Care	Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact umatter@ufl.edu so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.