

MAS 4105: Linear Algebra 1

Fall 2018

Location: MAT 116
Time: MTWF 1:55pm-2:45pm
Instructor: Michael Hull
Email: mbhull@ufl.edu
Website: people.clas.ufl.edu/mbhull/
Office: LIT 452
Office Hours: MWF 1:00pm-1:45pm

TA: Doug Pfeffer
Email: d.pfeffer@ufl.edu
Office: LIT 433
Office Hours: F 11:45am-12:35am

Course Description

Linear equations, matrices, vector spaces, linear transformations, determinants, eigenvalues and inner-product spaces. Includes both theory and computational skills. Develops the ability to reason through, and coherently write, proofs of theorems. For math majors, this course serves as a transition from a study of techniques into more conceptual math; for engineering and science majors, it serves also as a coherent foundation in linear algebra.

Textbook

Linear Algebra by Stephen H. Friedberg, Arnold J. Insel, and Lawrence E. Spence.

Weekly Schedule

Classes on Monday, Wednesday, and Friday will typically consist of lecture. Tuesday classes will be run by our TA and will consist of two parts. In the first part, students will be given a chance to ask questions about the homework problems. In the second part, students will be asked to read and evaluate proposed “proofs.” (See Proof Reading.)

Homework

Students will be assigned to read sections of the textbook and complete practice problems at the end of those sections. The practice problems for each section will be posted online here: <https://people.clas.ufl.edu/mbhull/mas-4105-linear-algebra-1-fall2018/>. Practice problems will not be collected or graded.

Quizzes

There will be a quiz once a week, usually on Wednesdays. Each quiz will be based on recently assigned practice problems. Students will be allowed to drop their 2 lowest quiz grades.

Proof Reading

Developing the ability to read and write proofs is an explicitly stated goal for this course. On Tuesdays students will be given proposed “proofs” and asked to evaluate whether they are correct, complete, and clear. Sometimes these proofs will be provided by the instructor and sometimes students will be asked to evaluate proofs written by other students in the class. Since mathematics is a collaborative process, students will typically work together with a group to evaluate these proofs, however each student must turn in their own evaluations at the end of the class.

Proof Writing

In addition, students will be assigned to write a proof once a week. These proofs will typically be assigned on Friday and turned in the following Tuesday; as with quizzes, the two lowest proof grades will be dropped. Proofs are expected to be written legibly in complete sentences and using correct grammar. While students are allowed to discuss the ideas in these proofs outside of class, students are *not allowed to directly copy proofs from each other or from any other source*.

Exams

There will be an in-class midterm exam and a final exam. The midterm will be tentatively scheduled for Wednesday, 10/17. The final exam will be Monday, 12/10 3:00pm-5:00pm. Students who expect to have conflicts with the exam times should make arrangements with the instructor as soon as possible. Make-up exams will only be given under extraordinary circumstances.

Grades

Final grades for the course will be computed as follows:

Quizzes:	25%
Proof writing:	25%
Proof reading:	10%
Midterm:	20%
Final:	20%

Final letter grades will be assigned according to the standard scale: 93-100 A, 90-92 A-, 87-89 B+, 83-86 B, 80-82 B-, 77-79 C+, 73-76 C, 70-72 C-, 67-69 D+, 63-66 D, 60-62 D-, 0-59 E.

UF Grading Policy

<https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>

Honor Code

UF 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 or TAs in this class.

Attendance Policy

Attendance in class is required, see the university attendance policy at <https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx> for more information.

Disability Accommodation

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, 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.

Course Evaluation

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at <https://evaluations.ufl.edu> during the last two or three weeks of the semester. Summary results of these assessments are available to students at <https://evaluations.ufl.edu/results/>.

Contact information for the Counseling and Wellness Center

<https://counseling.ufl.edu/>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies