

NCSU Mathematics Department

MA 405-001 – Introduction to Linear Algebra

Summer 2019, MTWTF 11:40AM-1:10PM SAS 01218

Instructor: Ronald Fulp

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**Office Hours: 1:20-2:20 Monday & Thursday, other times by appointment
(subject to change)**

Text: *Linear Algebra with Applications*, by Steven J. Leon, 9th edition, Pearson, 2014, ISBN 978-0321962218. The 8th edition is also acceptable if you can coordinate exercises.

Topics:

Chapter 1	(3 Days)	Linear equations, row reduction, matrix algebra
Chapter 2	(2 Days)	Determinants
Chapter 3	(4-5 Days)	Vector spaces, subspaces, linear independence, basis and dimension, coordinates, row space, null space
Chapter 4	(3 Days)	Linear transformations, matrix representations of linear transformations, similarity
Chapter 5	(4 Days)	Orthogonality, Gram-Schmidt, QR factorization
Chapter 6	(4 Days)	Eigenvalues, eigenvectors, diagonalization

There will be three tests which will count 20% each, homework and homework quizzes will be assigned and graded and will count 15%, the final exam will count 25%. Test dates will be determined as the course proceeds with the first test occurring roughly at the end of section 3.1 in the book and TENTATIVELY will be on Friday May 24

**Final Exam is scheduled for
Wednesday, June 19, 1:00-4:00, SAS 01218.**

The date and time of the final exam are fixed. Please take them into account when scheduling plane tickets or making other obligations as the university has strict policies on missing the final exam.

Attendance is required. No permission is granted for skipping a test except for medical or similar serious reasons. Proper documentation is required otherwise your score will be zero. Make-up tests are not given but grades are adjusted when there is appropriate documentation of an absence. Excessive absences will result in a lower grade.

Students are responsible for reviewing the NC State University policies, regulations, and rules which pertain to their course rights and responsibilities:

[Equal Opportunity and Non-Discrimination Policy Statement](https://oied.ncsu.edu/equity/policies/) with additional references at <https://oied.ncsu.edu/equity/policies/>

[Code of Student Conduct](#)

[Grades and Grade Point Average](#)

[Credit-Only Courses](#)

[Audits](#)

Attending every lecture and recitation section (in its entirety) is considered part of the course requirement. No provisions will be made for students to make up missed work or tests except as spelled out in the University's attendance regulation available at <http://policies.ncsu.edu/regulation/reg-02-20-03> .

Incompletes are not offered except in cases where special circumstances (such as outlined in the attendance regulation mentioned above) make it impossible for a student to complete the course. Even in these special circumstances, incompletes will not be offered unless the student was in a position to pass the class before the special circumstance arose. In particular, incompletes cannot be used as a way to "bail out" when a student feels that they cannot pass the course or feels they cannot do all the work they put off until the end of the semester.

Reasonable accommodations will be made for students with verifiable disabilities. In order to take advantage of available accommodations, students must register with the Disability Services Office at Suite 2221, Student Health Center, Campus Box 7509, 919-515-7653. For more information on NC State's policy on working with students with disabilities, please see [Academic Accommodations for Students with Disabilities Regulation \(REG02.20.01\)](#) .