Math 321: Linear Algebra Spring 2024

Instructor: Prof. Jens Lorenz

SMLC 226

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office hours: MW 3-4:30

Time: MWF 2 - 2:50

Place: Dane Smith Hall, Room 226

Text: (required)

Linear Algebra with Applications, second edition by Jeffrey Holt

Basis for Grading: Homework, a midterm exam, the final

Note: Qualified students with disabilities needing appropriate academic adjustments should contact me as soon as possible to ensure your needs are met in a timely manner.

Note: In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered responsible employees by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

Syllabus

- 1. Matrices and systems of linear equations
- 2. Gaussian elimination
- 3. Linear independence
- 4. Linear transformations
- 5. Matrix algebra
- 6. Subspaces
- 7. Determinants
- 8. Eigenvalues and eigenvectors
- 9. Inner products