

Syllabus: Math 310

MATH 310 Applied Linear Algebra I, Fall 2015
22632 - LCD - undergrad MWF 10:00-10:50, S& ES 130
Instructor: Shmuel Friedland
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OFFICE HOURS: MW 11:30-12:30, F 8:00-8:50, or by appointment.

TA: Samuel Cole
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OFFICE HOURS: M 11:00-1:00, W 12:00-1:00 MSLC (SEO 430)

Course Website: <http://www.math.uic.edu/math310>

TEXT:

1. *Linear Algebra and its applications* by David C. Lay, Steven R. Lay, Judy J. McDonald, Addison-Wesley, 5-ed., 2016

ISBN: 978-0-321-98261-2; 0-312-98261-4

Syllabus: We will be developing tools involving matrices and vectors to study linear systems of equations. These methods are used in many real-world problems, and the course emphasizes concrete techniques and computations, as opposed to more theoretical considerations. Topics to be covered include Gaussian elimination, linear transformations, orthogonal projection, least squares, determinants, eigenvalues and eigenvectors, diagonalization of symmetric matrices.

Sections in the book that will covered, usually one section per class:

1.1-1.10, 2.1-2.5, 3.1-3.3, 4.1-4.7, 4.9, 5.1-5.5, 5.7, 6.1-6.6, 7.1, 7.4(?).

An interested student can consult my notes <http://www2.math.uic.edu/~friedlan/math320lecS13t.pdf>

PREREQUISITE: *Grade of C or better in MATH 210.*

Homework problems:

Will be assigned a week in advance. Homework will not be collected. The quizzes will be close to my lectures and HW problems. See my website: [//www.math.uic.edu/~friedlan](http://www.math.uic.edu/~friedlan)

GRADING:

1. Quizzes - 20%. (Usually there would be 10 minutes quiz in the end of the class once a week, except the first week of classes, and the exam week.) For the course cumulative grade I will count 10 best quizzes.

First quiz: Wednesday, September 2.

2. 2 Midterms - 20% each. **Dates:** Wednesday, September 30, Wednesday, November 11, 2015.

3. Final Exam - 40%. **Date:** 10:30 - 12:30, Friday, December 11, 2015.

4. **No calculators will be allowed in quizzes and exams!**

Students with Disabilities:

Students with disabilities who require special accommodations for access and participation in this course must be registered with the Office of Disability Services (ODS). Students who need exam accommodations must contact ODS in the first week of the term to arrange a meeting with a Disability Specialist. Please contact ODS at (312)-413-2183 (voice) or (312)-413-0123 (TTY).

Academic Dishonesty:

Instances of academic misconduct (including cheating, fabrication, plagiarism, threats, examination by proxy) shall be handled pursuant to the student Disciplinary Policy.