MAT313 FALL 2025

SYLLABUS

Welcome to MAT313!

To help get things started, I have assembled below some important information about this course, including details on Exams, Grades, Homework Assignments, etc. Please **READ CAREFULLY** and in its entirety. This and much more information can be found in the course webpage:

> `http://www.lehman.edu/faculty/rbettiol/lehman_teaching/2025mat313b.html`

1. **About this course.** As described in the official Lehman College course description, the contents of this course include: *"Systems of linear equations, matrices, determinants, eigenvectors and eigenvalues, vector spaces and linear transformations."* This means we will learn the basic mathematical tools to create and analyze linear models, which appear naturally in many parts of science and technology, and are useful, for example, in digital signal and image processing, machine learning, finding "best fitting curves" to produce models in economics and finance, etc. The key concepts we will study are vectors, the ambient spaces where they live (vector spaces), and basic ways to modify them (linear transformations). I strongly recommend you watch the following introductory short video by `3Blue1Brown` that offers a great panoramic view of some topics we will cover, from an interesting perspective: `https://www.youtube.com/watch?v=fNk_zzaMoSs`

2. **Classes.** This is an in-person course, and your ***attendance in person is expected in all lectures***, which will be at **Gillet 225, 11:00am–12:40pm**, on Mondays and Wednesdays according to the Registrar's calendar. There is no option available to attend classes online for this course. However, please be mindful of CUNY's safety guidelines on public health, and ***do not come to class if you are feeling sick.*** Even though classes are in-person, some course activities (such as the weekly homework, see details below), will be conducted online. You can find detailed information on the specific plans for each class in the day-by-day schedule on the course website, which is subject to change but will be always kept updated. Please remember to refresh your browser every time you access the schedule, so that you open the latest version.

3. **Websites.** There are 3 important websites you will use for this course:

(A) Course website: `http://www.lehman.edu/faculty/rbettiol/lehman_teaching/2025mat313b.html`

(B) Pearson's MyLab: `https://mlm.pearson.com/northamerica/`

(C) Brightspace: `https://brightspace.cuny.edu/d2l/home`

4. **Textbook.** We will use the following textbook:

- Linear Algebra and its Applications, by D. Lay, S. Lay, J. McDonald, Pearson (6th edition)

While you do not need the physical book, ***you must purchase the MyLab access code from Pearson***, to have access to the online homework system we will use weekly. If you recently purchased a *multi-semester* MyLab access code for another course at Lehman (e.g., MAT 108, 126, 132, 171, 172, 175, 176, etc) it may still be valid for this course.

5. **Homework.** All homework will be done via Pearson's MyLab website. The course ID for this class is: **bettiol08079**. Please go to the folowing URL: `https://mlm.pearson.com/enrollment/bettiol08079` to register as a student in this class on MyLab.

Homework assignments will be due **weekly on Monday at 11.59pm**, according to the day-by-day schedule, but you can start working on it anytime. You will receive **immediate feedback via MyLab**, which will give you the chance to learn how to solve any problems you didn't get right the first time and try again. **It is your responsibility to stay up-to-date with the homework assignments** and allow yourself sufficient time to complete them prior to the deadline, taking into account any possible technical or internet connection issues.

6. **Exams.** This course has two exams that will take place *in person* as follows:

  (i) Midterm Exam: **October 22, 2025, 11:00am–12:40pm**

 (ii) Final Exam: **December 22, 2025, 11:30am–1:30pm**

There is no alternative opportunity to take this exam remotely or on a different date.

7. **Grades.** Course letter grades will be determined based on **homework (40%), Midterm Exam (30%), and Final Exam (30%)**.

8. **Office hours.** Weekly office hours will be announced shortly after the start of the semester. Check your email for details.

9. **Students with disabilities.** Lehman College is committed to providing access to all programs and curricula to all students. Students with disabilities who may need classroom accommodations must register with the Office of Student Disability Services. For more information, please contact the Office of Student Disability Services, Shuster Hall, Room 238, at 718-960-8441.

10. **Academic integrity and class policies.** The highest levels of academic integrity, as detailed in the

  (1) CUNY Academic Integrity Policy

        https://www.cuny.edu/about/administration/offices/legal-affairs/policies-resources/academic-integrity-policy/

  (2) Lehman College Undergraduate Bulletin

        https://lehman-undergraduate.catalog.cuny.edu/academic-services-and-policies/academic-integrity

must be upheld in all activities related to this course. CUNY-wide and Lehman College policies and procedures that are in effect regarding academic integrity, attendance, student conduct, secular and religious holidays, reasonable accommodations and academic adjustments, etc., will be followed strictly. Violations of any academic integrity policies will be referred to the Office of Student Affairs for disciplinary sanctions.