

Linear Algebra

Math-UA-140-005, Fall 2014

Syllabus

Instructor: Mutiara Sondjaja
Email: sondjaja@cims.nyu.edu
Office: Warren Weaver 725
Office hours: T 9-10am (Linear Algebra); M 4-5pm (general)

Class meeting: MW 11am-12:50pm in Goddard B02
To ask questions: use course Piazza page (coming soon)
Course webpage (temporary): <http://cims.nyu.edu/~sondjaja/2014-fall-linearalgebra.html>
Course webpage (permanent): via NYU Classes (coming soon)

Welcome to Linear Algebra!

Linear algebra is an area of mathematics devoted to the study of **linear operators** on **vector spaces**. A firm knowledge of linear algebra is extremely important because of its numerous applications in different areas of mathematics, computer science, engineering, physical and biological sciences, and other disciplines that uses quantitative or computational methods.

Goals of the course

By the end of the course, students will be able to:

- Identify linear operators and vector spaces
- Know the basic computations associated with linear operations on finite dimensional vector spaces
- Communicate mathematically, including: understanding, making, and critiquing mathematical arguments

Textbook

David Lay's *Linear Algebra and its applications*, 4th edition

Grading

Homework	20%
Quizzes & In-class work	15%
Midterm 1	15%
Midterm 2	15%
Final Exam	35%

Homework

- There are 13 homework assignments
- Homeworks are generally due **at the beginning of class on Wednesdays**
- No late homework will be accepted (no exception)
- The lowest homework score will be dropped

Quizzes (9%) and In-class work (6%)

- There are 10 quizzes
- Quizzes are given in class on **Mondays**
- The lowest quiz score will be dropped
- Expect to get your hands dirty in class! There will be a lot of in-class work, some of them will be submitted and graded

Exams

Midterm 1	Wednesday, October 8 (in class)	Ch 1, 2
Midterm 2	Monday, November 17 (in class)	Ch 3, 4, 5.1-5.3
Final Exam	Monday, December 15 (location TBD)	All (cumulative)

How to get help for this course

- **Instructor's and TA's Office Hours.** Office hours schedule, course information, homework assignments, and grades will be posted in the **NYU Classes** page for our section
- **Piazza:** Use the course Piazza page to post questions and to respond to classmates' questions. When you do, make sure to be courteous and respectful. You should be enrolled in the course Piazza page automatically by the end of the second week of the classes (if not, let me know).
- **Mathematics Tutoring Center:** This is a free service offered by the math department to students in the calculus sequence. It is located on the 5th floor of Warren Weaver Hall, Rooms 505 and 524. For more information: http://math.nyu.edu/degree/undergrad/tutor_schedule.html

Honor Code

You are expected to follow codes of academic integrity as specified by the university and the College of Arts and Sciences:

<http://cas.nyu.edu/page/academicintegrity>
<http://cas.nyu.edu/page/honorcode>

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3 11am - L1b: 1.1, 1.2	4	5	6
7 LA: Quiz 1 11am - L2a: 1.3, 1.4	8	9	10 LA: HW1 Due 11am - L2b: 1.5	11	12	13
14 LA: Quiz2 11am - L3a: 1.7, 1.8	15	16	17 LA: HW2 Due 11am - L3b: 1.9	18	19	20
21 LA: Quiz3 11am - L4a: 2.1, 2.2	22	23	24 LA: HW3 Due 11am - L4b: 2.3	25	26	27
28 LA: Quiz4 11am - L5a: 2.4, 2.5	29	30	1 LA: HW4 Due 11am - L5b: 3.1	2	3	4

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29	30	1	2	3	4
	LA: Quiz4 11am - L5a: 2.4, 2.5		LA: HW4 Due 11am - L5b: 3.1			
5	6	7	8	9	10	11
	LA: HW5 Due 11am - L6a:		11am - Midterm1			
12	13	14	15	16	17	18
			11am - L7b: 3.2			
19	20	21	22	23	24	25
	LA: Quiz5 11am - L8a: 4.1, 4.2		LA: HW6 Due 11am - L8b: 4.3			
26	27	28	29	30	31	1
	LA: Quiz6 11am - L9a: 4.4, 4.5		LA: HW7 Due 11am - L9b: 4.6			

Sun	Mon	Tue	Wed	Thu	Fri	Sat
26	27	28	29	30	31	1
	LA: Quiz6 11am - L9a: 4.4, 4.5		LA: HW7 Due 11am - L9b: 4.6			
2	3	4	5	6	7	8
	LA: Quiz7 11am - L10a: 4.7,		LA: HW8 Due 11am - L10b: 5.2			
9	10	11	12	13	14	15
	LA: Quiz8 11am - L11a: 5.3,		LA: HW9 Due 11am - L11b: 5.5			
16	17	18	19	20	21	22
	11am - Midterm 2		LA: HW10 Due 11am - L12b: 6.1,			
23	24	25	26	27	28	29
	LA: Quiz9 11am - L13a: 6.3,		LA: HW11 Due 11am - L13b: 6.5			
30	1	2	3	4	5	6
	LA: Quiz10 11am - L14a: 7.1		LA: HW12 Due 11am - L14b: 7.2			

Sun	Mon	Tue	Wed	Thu	Fri	Sat
30	1 LA: Quiz10 11am - L14a: 7.1	2	3 LA: HW12 Due 11am - L14b: 7.2	4	5	6
7 11am - L15a:	8	9	10 LA: HW13 Due 11am - L15b:	11	12	13
14 10am - LA Final	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31	1	2	3