

01:640:250 Linear Algebra, Summer 2008 (Updated on Jun 20 2008)

Textbook: Spence, Insel, & Friedberg: *Elementary Linear Algebra: A Matrix Approach*, 2nd Edition, Prentice-Hall (ISBN # 978-0-13-187141-0).

Instructor: Tianling Jin

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Office Hour: To be determined

Meeting info: Jun 23 - Aug 1, MWF 6:00-8:30PM RAB-110A Cook/Douglass

Course Webpage: <http://www.math.rutgers.edu/courses/250/>

Quizzes: A quiz will be given at the beginning fifteen minutes of each lecture. Each quiz consists of two questions of the previous lecture, mostly from the homework problems. **There are no make-up quizzes.** The worst quiz grade will be dropped.

Homework: There will be three homework assignments. The due dates are: **7/2, 7/18** and **7/30**. I will collect them at the beginning of lectures. The first two assignments will be twice as long and will be worth twice as much as the last. **Late homework will NOT be accepted.** (See next page for detail)

Exams: There will be two eighty-minute “midterm” exams and a two-and-half-hour final exam. The first two exams are on **7/7** and **7/21**. We will take the exam during the first half, and the left time is devoted to discuss it. The final will take up the entire last day of class, **8/1**. No calculator is allowed in the exams. **If these dates present a problem for you, let me know far in advance and we will work something out. I will not be sympathetic if you wait until the last minute to resolve scheduling conflicts.**

Grading:

Component	Points
Quizzes	50
Homework	50
1 st exam	100
2 nd exam	100
Final exam	200
Total	500

Tutor: The Rutgers Learning Center will have free tutoring sessions for Math 250. Check for <http://rlc.rutgers.edu/tutoring.shtml> for more information.

We only have six weeks. This course will go by very quickly. Stay up to date with the material!

Suggested homework (only bold numbers to be handed in)

Show your works to get full credits.

Assignment 1: (due 7/2)

- 1.1 1, **3**, 5, **8**, 11, **21**, **24**, 25, 27, 33, 37-39, **45**, **46**
- 1.2 1, **3**, 11, 13, **15**, 17, 21, **27**, 29, **31**, 33, 35, **36**, 39, **42**, 45-49, 67, **68**
- 1.3 **1**, **5**, 7, **9**, 21, **23**, 27, 39, **42**, 45, 46, **49**, **57**
- 1.4 1, 3, **5**, 7, **9**, 13, 15, **19**, 21, 25, 27, 29, **31**, **35**, 37, 74-80, **88**
- 1.6 1, 3, **5**, **9**, 11, 13, 15, **17**, 19, 21, 23, **25**, **32**, 35, 42, **46**, 68, **69**
- 1.7 1, **3**, 5, 7, 9, 11, 13, **15**, 21, 23, 25, **27**, 29, **33**, **39**, 40, **52**, 71
- 2.1 1, **4**, 7, 9, **11**, 13, 15, **17**, 19, 21, **22**, 23, 34-36, 37, 47, **49**, 59
- 2.3 4, 7, **11**, 13, 15, **21**, 29, 31, **33**, 41
- 2.4 **3**, 5, 7, 9, **10**, 11, 15, 19, **22**, **45**, **46**, 57, **60**, 67
- 2.5 3, 5, 7, 9, 10, 11, 12, 13, 14, 15, 19

Assignment 2: (due 7/18)

- 3.1 1, **5**, 9, 11, **14**, 15, 19, **21**, 25, **31**, 33, 37, 39, 41, **43**, **56**, 70
- 3.2 **1**, 5, 7, 11, **15**, 21, **28**, 41, **43**, 44, 59, **60**, 69, 71
- 4.1 1, 3, **5**, **9**, 11, **19**, 25, 27, **29**, 31, 33, 35, **99**
- 4.2 1, 4, **5**, 9, 19, **20**, **27**, 28, **53**, 54, 58, **68**, 69
- 4.3 **1**, 3, 5, **7**, 9, 11, 13, **15**, **17**, 33, 40, **41**, 42, 43, **63**, 64, **74**, 79
- 5.1 3, **7**, 13, **17**, 21, 41, 42, **43**, 44, **45**, **57**, 58, 59, 60, **67**, 69.
- 5.2 1, 5, **9**, 13, 15, **17**, **21**, 25, 41, 45, 51, 53, **54**, 55, **71**
- 5.3 **1**, 3, **7**, 9, 11, 13, **15**, 17, **19**, 23, **25**, 27, 29, **33**, **35**, 37, 39, 41, **51**, 52, 53

Assignment 3: (due 7/30)

- 6.1 1, 3, **5**, 7, 9, 11, **13**, 17, **21**, 23, 25, **30**, 35, **38**, 49, **52**, **53**
- 6.2 1, 3, 5, **7**, 9, **13**, 15, 17, **19**, 21, 23, **41**, 44, 46, **50**
- 6.3 **1**, 3, 5, 7, 9, **12**, 13, 15, **18**, 26, 33, 34, **38**, **39**, 42
- 6.4 3, **5**, 7, 9, **11**, 22
- 6.5 **1**, 3, **5**, **11**, 13, 17, 21, **22**, **23**
- 6.6 **7**, **15**, **17**, **21**, **24**

Advice:

* One of the best ways to succeed in this course is to understand all the homework. It is easy to sit through a lecture or read a book and think you understand everything. But when you sit down to solve problems you realize there are lots of holes in your knowledge. This is why the homework is an essential part of the course. If there is something that you don't understand, ask me about it!

* It's a good idea to read each lecture's material before lecture. That way, you will already have a framework for the (often quickly-presented) material, and you will already have an idea about what you do and do not understand.

Tentative Schedule:

Lecture	Date	Plan
1	6/23(M)	1.1, 1.2, 1.3
2	6/25(W)	1.4, 1.6
3	6/27(F)	1.7, 2.1
4	6/30(M)	2.3, 2.4, (2.5 if have time), 2.7 only for reading
5	7/2(W)	Catch up and review, and hand in HW 1
6	7/4(F)	Independence day
7	7/7(M)	1 st midterm (Ch 1 & 2)
8	7/9(W)	3.1, 3.2
9	7/11(F)	4.1, 4.2
10	7/14(M)	4.3, 5.1
11	7/16(W)	5.2, 5.3
12	7/18(F)	Catch up and review, and hand in HW 2
13	7/21(M)	2 nd midterm(Ch 3, 4 & 5)
14	7/23(W)	6.1,6.2
15	7/25(F)	6.3 6.4
16	7/28(M)	6.5, 6.6
17	7/30(W)	Catch up and review, and hand in HW 3
18	8/1(F)	Final exam(Everything)