**Math-547, Linear Algebra with Applications** Summer-2 2019

MTWThF 11:30am-1:00pm, PH-383

**Instructor**: Richard Rimanyi

 CP-429 (no phone in my office)

 rimanyi@email.unc.edu

**Office Hours**: TTh 1:00, or by appointment. Office hours are intended to help you get unstuck — not started — on homework problems. Good office hours questions tend to take the form “I tried X, but it doesn’t seem to work because of Y ; what can I do?”

**Prerequisite**: Math 233.

**Text**: J. Holt: Linear Algebra with Applications (2nd Ed)

**Final**: Monday July 29, 11:30am-2:30pm

**Goals.** In this course we will be learn the main concepts of Linear Algebra, such as systems of linear equations, Euclidean spaces, subspaces, linear independence, span, dimension, matrices, determinant, eigen-space analysis, orthogonality. Besides the notions we will mostly focus on the computational, algorithmic part of linear algebra, but we will also touch upon some simple arguments behind the notions.

**About the course.** I will lecture on the key points and difficult concepts, but you will *need to read the book* for more details and *review your class notes* regularly. It is also very important that you work many problems every week *beyond the hand-in homework* assignments. Questions in class are encouraged.

**Group study** is encouraged. Collaboration on homework, or consulting a tutor or MHC is permitted. These rights, though, come with two responsibilities:

1. Write up your final solution independently from your collaborators. Copied work is unacceptable.
2. Acknowledge all collaborators and tutors by listing their names at the start of your solution.

Failure to shoulder these responsibilities constitutes an Honor Principle violation and will be dealt with accordingly.

**WebAssign HW**: class key: unc 2661 7491. The 12 assignments are now available. The lowest two WA-HW will be dropped. No HW extension will be granted.

**Written HW**: There will be 10 written assignments you need to hand in. They will be announced on <https://rimanyi.web.unc.edu/math-547-summer-2-2019/> . Your score on each problem will be based upon correctness and the quality of your presentation. The lowest two written-HW will be dropped. No late HW will be graded.

**Midterms**: The tentative dates of the two midterms are July 9, July 22. There will be no make-up midterms.

**Grades** will be based on a total of 500 points.

 WA-Homework 50

 Written Homework 50

 Midterms (2) 200

 Final 200

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 Total 500

I expect that 60% would suffice for a D, 70% for a C, 80% for a B, and 90% for an A.

It is expected that each student will conduct him or herself within the guidelines of the **Honor System**. All academic work should be done with the complete honesty and integrity that this University demands.