# Syllabus for MTH 210-E: Introduction to Linear Algebra

University of Miami, Spring 2022

www.math.miami.edu/~cscaduto/teaching/210-spring-2022/

## **Instructor:**

Prof. Christopher Scaduto c.scaduto@math.miami.edu

Office: Ungar 525

Office hours: W 10:30am-12:00pm (on Zoom), or by appointment

♦ Class time and location: MWF 1:00-1:50, Dooly Memorial 100

Class will be on Zoom until in-class lectures begin on January 31, 2022.

## References:

Introduction to Linear Algebra (5th ed) by Gilbert Strang

## Description:

Simply put, linear algebra is the subject of solving systems of linear equations; but in its truest form it is a beautiful synthesis of algebra and geometry that boils down to a few very important principles that pervade most of mathematics. Specific topics covered include: vectors, matrix algebra, systems of linear equations and related geometry in Euclidean spaces, fundamentals of vector spaces, linear transformations, determinants, eigenvalues, and eigenspaces. Other topics will be included time-permitting.

## Homework:

Each week, or every other week, I will assign some homework problems. The problems will be listed on the course webpage. Your lowest homework grade will be dropped. Collaborating with your peers on homework assignments is permitted, but your solutions must be written up in your own words; identical homeworks will not receive credit. No late homework will be accepted.

#### Exams:

There will be two midterms and a final exam.

## Grading:

Homework is 25 % and each exam is 25 %.

Standard university policies, including ones related to Covid-19, are assumed for this course. See https://coronavirus.miami.edu/information-for/faculty-and-researchers/index.html for details. Masks and distancing are required in the classroom.