Linear Algebra and Applications AMTH/MATH 222

Michael Magee, michael.magee@yale.edu

Textbook

Introduction to Linear Algebra, 4th edition, Gilbert Strang.
Warning: This is the blue book by Strang. Check your book is blue!

Topics covered

We are going to cover Chapters 1,2,3,4,5,6,7,10 of the textbook for the theory of Linear Algebra. The main theoretical topics (chapter headings) are *Introduction to Vectors*, *Solving Linear Equations*, *Vector Spaces and Subspaces*, *Orthogonality*, *Determinants*, *Eigenvalues and Eigenvectors* and *Linear Transformations*.

I will also cover some interesting applications of Linear Algebra, some from the textbook and also maybe some from other sources.

Prerequisites.

Officially, MATH 115 or equivalent. Unofficially, knowledge of basic algebra (precalculus) should be enough to do well in the class.

Class Website

All important information and resources for the class can be found at
http://users.math.yale.edu/users/mrm89/linear.html

Times and locations

We meet for Lecture in Watson Center (WTS) A51, on Monday, Wednesday and Friday from 10.30am to 11.20am. My office hours are to be announced.

How the class is graded

One Midterm exam, worth 30%. Final exam worth 40%. There will be 10 homeworks for a total of 30%.