

Syllabus for Math 341

Linear Algebra

Fall 2019

(A) **Instructor:** Dr. Shamgar Gurevich.

Office: VV317.

Time and Location: M-W-F 1:20-2:10pm, Room VV B115.

Office Hours: M-W-F 10:45-11:45.

(B) **Grader:** Mr. Yu Huang.

Office: .

Office Hours: .

(C) **Textbook:** The main text for this course are the notes you will take for yourself in lectures. There is no required book for this course. I will mostly follow "Linear Algebra" by K. Hoffman and R. Kunze I will also look sometime for examples and exposition from "Linear Algebra and its Applications" by G. Strang, and "Lecture on Linear Algebra" by I.M. Gelfand.

(D) **Content:** We will study part from the following basics of linear algebra: Fields, vector spaces, bases and dimension, linear transformations, matrices, determinants, diagonalization, simultaneous diagonalization, inner product spaces, spectral theorem for normal operators, dual space, tensor product, canonical forms, quadratic forms.

(E) **Grading:** There will be weekly homework assignments which are due every Friday, there will be a quiz on the homework and on definitions every Friday, also there will be presentations by students of solutions to homework problem every Friday. As usual there will be one midterm exam and one final exam. The grade distribution will be computed as follows:

Homework presentation:	15%
Quizzes:	25%
Midterm:	30%
Final:	30%

- The midterm test will be on Wed. October 16, 4-6pm in VV B115.
- The final test will be on Friday December 6, 4-6pm in VV B115.

(F) **Attitude:** In our course we will study the basics of linear algebra which is one of the most important subjects of mathematics. The goal will be to help you develop your skills on how to think about linear algebra. I expect you to be active and participate in the lectures and the various activities.

Good Luck!