Syllabus for Math 541 Group Theory and Symmetry FALL 2017

Instructor: Dr. Shamgar Gurevich, VV 317. Lectures: MWF 12:05-12:55pm at VV B333. Lecturer's office hours: MF 1-2pm.

TA: Lorenzo Najt.TA's discussions: W 4-5pm at VVB333.TA's office hours: Tue 2-3pm, Thu 8-10.

Texts: The only required text is the notes you will take from the lectures and discussions. The lectures have some connection to parts from the book "Algebra" by M. Artin, mainly chapters 2, 5, 6, 9, 10.

Content: Motivations, Notion of group and basic group theory, symmetry of objects in plane and space.

Your work: Every Friday (starting on Sep. 15) there will be a "10 min." test on one question (any one can appear) and one definition (any one can appear) from the HW that was posted earlier. We will have a Midterm test on Friday Ocober 27, 4-6pm, and a final test in December.

Grading: Your work will count toward the grade as follows:

Friday	34%
Midterm	33%
Final	33%

The translation into letter grade is as follows: 93-100 is A, 85-92 is AB, 77-84 is B, 69-76 is BC, 61-68 is C, 50-60 is D, below 50 is F.

Attitude: In our course we will study basic algebraic structures and some of the problems that motivated their appearance. The attitude will be to help you to develop your way on how to think about some mathematical objects that appears in the formulations and solutions of various problems. We will learn that good problems and their mathematical formulations are the key ingredient in finding solutions, and we will develop abilities to express ourselves mathematically, including writing computational results and proofs.

Good Luck!