

**Math 741**  
**Algebra I for Graduate Students**  
**F15 - Syllabus**

**Instructor:** Dr. Shamgar Gurevich, 317 VV.

**Grader:** Mr. Ben Mark.

**Time and Location:**

- Lectures: MWF 1:20-2:10am, Room STERLING 1313.
- Presentations: M 5-6:30pm.

**Office Hours:** W 2-3pm or by appointment.

**Texts:** The course notes. In addition the following books can be of some help: Algebra by Artin, Algebra by Lang, Linear representations of finite groups by Serre.

**Computer systems:** Gap, Magma, Matlab, Sage, Etc.

**Course assignments and grading:** There will be:

- Homework every week. Presentation of solutions as part of your team in our weekly meeting.
- Take home exam: Given Dec 1, and due in Dec 11.

The final grade is composed from:

|      |     |
|------|-----|
| HW   | 50% |
| Exam | 50% |

**Topics:** Basics of

1. Groups Theory.
2. Representation Theory.
3. Ring Theory.
4. Linear and Multilinear Algebra, Category Theory.

**Good Luck!**