18.702 SUBJECT DESCRIPTION

Group Representations, Rings, Fields

Web address: www-math.mit.edu/classes/18.702/

The class will meet MWF 11-12 on zoom. The site is on Canvas: 929 0367 0612.

Prerequisite: 18.701

Formal Course Requirements:

1. There will be weekly problem sets, which will be graded though, depending on the staff available, we may not be able to grade all problems.

- You must turn in your assignments on time.
- List your collaborators at the top of your assignment.

Comments on the problems will be posted after the assignments are due.

2. There will also be six short quizzes during the semester, each consisting of perhaps two problems. Dates for the quizzes are the following Fridays:

Feb 26, Mar 12, Mar 26, Apr 9, Apr 23, May 14.

3. Grades for the course will be based on the problem sets (70%) and the quizzes (30%). There will be no final exam.

The problems on the quizzes will be rather simple, and you are required to work on the quizzes alone. You may consult the text for the quizzes, but no other source is permitted.

The weekly problem sets will contain problems that are lengthier and more difficult than those in the course outline or in the quizzes. They are the most important part of the course, and will require serious thought. You are encouraged to work in a group on the problem sets. However, the solutions that you hand in must be written entirely by you. Consulting existing solutions, such as from previous years' problem sets or from the web, is not permitted, either for homework or for the quizzes.

I assume that many of you will have a working group in place from 18.701. If you can't find a group to work in, contact me.

The course outline contains reading assignments and exercises on the topic of each lecture. I rely on you to do the reading. Do it ahead of time if possible.

The exercises in the outline are simple enough that they should be doable, once the material is absorbed. Do not turn these problems in, but work them out and write up your solutions. Writing the solution up clearly is the most instructive part of a simple problem.

Contact me immediately if you have serious difficulties with the exercises in the outline.

Text: Artin, *Algebra*, 2nd ed.

Instructor: Mike Artin, artin@math.mit.edu, Room 2-274, extension 3-3689.
Office Hours: W 1-2, Th 1-2, or by appointment.

I'll use the same zoom site: 929 0367 0612 as for the class.

TA: tba
Office Hours: tba

You are encouraged to make use of the office hours. Please sign in during the first half hour. We may leave after a half hour if no one is there.

If you can't make the times listed, email one of us to set up an appointment.