

SYLLABUS
Math 410: Fundamental Concepts of Modern Algebra
Section 39641
Spring 2021

Lectures: MWF 1:00 – 1:50pm, online

Instructor: Spencer Gerhardt

Email: sgerhard@usc.edu

Office Location: <https://usc.zoom.us/j/5478778449>

Office Hours: MW 2:00 – 3:00pm, W 6:00 – 7:00 pm, or by appointment

Course Description: (4 units) Sets; relations; groups; homomorphisms; linear groups; symmetric groups; Sylow's theorems; introduction to rings and fields.

Prerequisites: Math 225 (one additional 400 level math course is recommended).

Text: **Abstract Algebra with Applications** by Audrey Terras, Cambridge University Press, 2019.

Discussions: Tuesdays 2:00 – 3:50pm, online

Teaching Assistant: Sanat Mulay

Email: smulay@usc.edu

Office Hours: [Math Center Schedule](#)

Math Center: The virtual [Math Center](#) is open Monday-Friday from 8am to 7pm on most days. It is primarily run by math graduate students here at USC. The office hours of your TA will also be held in the Math Center, although you can go to the Math Center at any time it is open to ask for help.

LOGISTICS

Our course will use the following online systems:

- Blackboard as the main hub for all communication, links, and course materials.
- Zoom for lectures, office hours, and exams.
- Gradescope for all written classwork.

You will access the latter systems through links in our Blackboard page and none of them should require separate logins. We'll work through the initial setup in our first lecture. All are free.

Lectures will be held MWF in Zoom from 1:00 – 1:50pm PST.

Zoom etiquette: This will be a hands-on course with interaction in small groups, and we'll try to maintain the atmosphere and norms of a classroom as much as possible, meaning that you should be in lecture on time and have your **cameras on** for meetings.

You will need to submit your documents to Gradescope in PDF format.

There are many free phone apps that you can use to scan your work, including Adobe Scan and others.

During the submission process please tag each question so the grader can find it.

ASSIGNMENTS

Homework: There will be homework posted regularly on Gradescope. These assignments will also be submitted through Gradescope.

EXAMS AND GRADING

Exams: There will be exactly 3 exams. The first two will be held during the normally scheduled class time. If you can't be present, you must contact me **before** the exam date to make other arrangements.

Each exam will be conducted via Zoom, and will be an open-book, open-note test. You are expected to show all of your work for every question and give detailed explanations for your answers. You may not consult with any other human during the exam, either in person, via chat, or in internet forums. This would be considered a serious violation of the Student Conduct Code.

- **Exam 1:** Friday, February 26 2021.
- **Exam 2:** Friday, April 9 2021.
- **Final Exam:** [Wednesday, May 5 2021 \(2 – 4pm\)](#).

Grading and Curves: Your grade for the course will be calculated as follows:

- Homework: 35%
- Midterms: 20% each
- Final Exam: 25%

OTHER POLICIES

Disability Services: Any student requesting accommodations based on a disability is required to register with Disability Services and Programs (DSP) each semester. A letter of verification for approved accommodations can be obtained from DSP. Please be sure the letter is delivered to me as early in the semester as possible.

http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html
ability@usc.edu