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44697 (Lec B)  
Class Hours: MWF 2-2:50pm

Final: Friday, Dec 18, 1:30-3:30pm  
Discussion Hours: TuTh 9:00- 9:50a

44712 (Lec C)  
Class Hours: MWF 9:00-10:00a

Final: Wed, Dec 16, 8:00-10:00Am  
Discussion Hours: TuTh 4:00- 4:50p

## Course Description

This is a proof based course on group theory. Axioms for group theory; permutation groups, matrix groups. Isomorphisms, homomorphisms, quotient groups. Special emphasis on doing proofs.

## E-mail Policy

There will be plenty of opportunities to ask/answer questions. Questions on policy, or questions about personal situations should be sent to the instructor and the TA. However, we encourage you to ask questions on math content through PIAZZA. Every students in the class will be able to ask and answer questions on piazza (and you can do so anonymously). Talking about class content with your peers will reinforce your understanding of the materials, and also help create a community of learners in the class. Learning assistants will monitor PIAZZA once a day on weekdays to make sure all questions get answered.

## Textbook

We will be using an interactive textbook written by instructors here at UCI. You can download it on the course's Canvas page. We are writing the textbook on purpose for this course, but of course it takes time. We are likely to update new versions as the quarter proceeds. Please make sure to check the canvas page for updates. This textbook contains everything you will need: exercises and activities to guide your learning, links to instructional videos, and your homework exercises.

*Some students are not very comfortable reading math textbooks. In this class, we want you to think of the textbook as your devoted partner in learning!* We are convinced that it will help you, so we are making reading the textbook a requirement. You will have to prepare for class by reading the textbook. There will be short mini-quizzes before every lecture on the required reading. (No reading quizzes for discussion session, except in week 0.)

## Class structure

**This is a proof based course, and because we learn by doing, the textbook provides many opportunities to get your hands dirty and practice your proof skills. We expect all students to take a very active role in their learning.** Class will be held via Zoom during the designated class time. Prior to each lecture, we will assign you some reading from the textbook. We have embedded videos in the textbook to introduce the content of each section and to cover the hardest

parts of the material. Reading quizzes will also be assigned to test your understanding of the material, and need to be completed by 9am on the day of instruction. You will have 2 reading quizzes per week. During class, you will work through exercises and activities in the textbook in breakout rooms. The instructor/TA and several learning assistants will assist each group.

**Weekly checklist** *Please consult the Canvas page for a weekly checklist.*

## Class preparation

Students are expected to prepare for class by reading a designated section of the textbook and completing a couple of basic problems. You will be tested on this preparation with a short Reading Quiz (assigned through Canvas).

## Grading Policy

- **Homework 15%:** There will be assignments due every Saturday at 10 pm starting on October 10th. The assignments will be questions from the textbook (specifically the blue colored questions). Your lowest 2 homework scores will be dropped. However, there will be no makeup homework.
- **Quizzes 15%:** There will be quizzes every Thursday, except for week 0, the week of the midterm and the last week of class. The quizzes will be administered on Canvas and will be approximately 40 minutes long. (They will take you much less, but we want to allow time to upload files on canvas). You will have a 24 hour window to take the quizzes. Your lowest 2 quizzes will be dropped. However, there will be no makeup quizzes.
- **Reading quizzes 10%:** In preparation for class, twice a week there will be a short quiz on the required reading and problems. (The quiz will stay open for 30 minutes but we expect you to take much less.) Please plan to read the textbook prior to starting the quiz, or you will find yourself out of time. You are welcome to refer back to the textbook while you take a reading quiz. Your lowest 5 scores from reading quizzes will be dropped, so there is no need to stress if you miss one or have a bad day. However, there will be no makeups.
- **Participation 5%:** You will be expected to take an active role in the classroom. While we value attendance of lectures and discussions, we understand issues of scheduling for students overseas so we are building flexibility by adding additional opportunities to work with your peers on class materials. These study sessions are offered in the late afternoon to increase chances for participation. Students will be expected to attend 3 "active learning meetings" per week, and you will have a total of 10 choices per week (choosing among discussion sessions, lectures and study sessions). If you attend a lecture or discussion, please go to the session you are actually enrolled in.
- **Midterm 25% :** The date is TBD.
- **Final Exam 30%:** Our final is on Friday, December 18, 1:30-3:30pm for Section 44697 (Lec B), and on Wednesday, December 16, 8:00-10:00am for Section 44712 (Lec C).

**Piazza** We will also have an active Piazza page, which will be shared between the three Math 120A sections. Students are encouraged to post problems on Piazza, and of course also answer questions from your peers. Actually, answering math questions on piazza is one of the ways you can earn back participation points in the class, if you happen to miss a class meeting! (The answers should be relevant to questions on the material of the class meeting you missed.) It is very likely that the questions you ask/answer will help other students! The Piazza page will be checked several times a week by our class Learning Assistants at the times listed below:

Day	Active Piazza Answering
Monday	11:00-11:50am 6:00-6:50pm
Tuesday	3:00-3:50pm
Wednesday	6:00-6:50pm
Thursday	5:00-5:50pm
Friday	10:00-10:50am 6:00-6:50pm
Saturday	Sometime in the morning
Sunday	NA

Please consult the Canvas page for login information.

**Office Hours** Office hours will be held over Zoom and will be open to students in all three sections of Math 120A. This means that there will be lots of opportunities for you to get extra help at different times. (We made a special effort to make sure all time zones are covered!) Please consult the Canvas page for a full schedule.

**Weekly Study Sessions (Supplemental Group Meetings)** If you are unable to attend class (e.g. due to time zone differences or to an emergency), you will have the opportunities to attend supplemental study sessions via Zoom, and engage in group work with your peers under the guidance of learning assistants, instructors or TAs. This will allow you to work through what was covered in class as well as make up your participation grade. Please consult the Canvas page for a full schedule.

**Academic integrity.** Following the UCI academic integrity policy is a requirement to pass this class. Please see this website for more information on that policy: <https://aisc.uci.edu/>

**Your e-mail address.** Announcements to the class will be sent via e-mail, using the roster at <https://eee.uci.edu>. It is your responsibility to check this e-mail address regularly.

**Zoom links.** Please consult the Canvas page.