Course overview and essential information

Course overview

This is an undergraduate course on abstract algebra. It begins by introducing various notions of algebraic structures, and then proceeds to develop the theories of groups and rings.

The prerequisites for the course are linear algebra, and a course which teaches the basics of reading and writing proofs, such as Math 347.

The course will be taught in person (events permitting). I am teaching two sections of this course: D13 (meeting 11am-noon MWF) and E13 (meeting 1pm-2pm MWF), both in Altgeld Hall 345. I will try to keep the two sections as identical as possible.

Course components

1. Lectures. Most class days will be lectures, but with some breaks for discussion or group work possible.
2. Readings. I’ll list sections from the textbook to read for each class day, if applicable. I will also post my lecture notes.
3. Lecture notes. I post lecture notes. (These may be updated frequently.)
4. Homework. Assigned weekly: you will find the assignment on the homepage of the course. Due Mondays by 1pm (CST), for both sections. Submission by paper is preferred, but I will also accept online submission. (For online submission, scan your papers using a phone scanning app such as Microsoft Lens or Adobe scan which is designed to produce a legible .pdf.)
5. Quizzes. There may be online quizzes every so often.
6. Exams. Four midterms and a final. Midterms will be held during class, on the dates: W 22 Sep, W 13 Oct, W 3 Nov, W 1 Dec. The time and date of the final is according to the University’s schedule.
7. Office hours. I will schedule at least 3 hours a week for office hours. During office hours you can find me in my office, or you can talk to me via Zoom, to answer any questions or discuss anything you want. See here for up-to-date info about office hours.

https://oeis.org/A001034
Textbooks

The course is based on my lecture notes, as well as on a free online textbook. The textbook is Goodman, Algebra: Abstract and Concrete [online], edition 2.6.

Grading

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<tbody>
<tr>
<td>Homework and Quizzes</td>
<td>50%</td>
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<tr>
<td>Midterms</td>
<td>20% (5% each)</td>
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<tr>
<td>Final</td>
<td>30%</td>
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1 lowest homework will be dropped. Note: quizzes will be no more than 5% of total grade.

Academic integrity

Please consult the University of Illinois Urbana-Champaign Student Code [online], especially Article 1, Part 4: Academic Integrity. Every student is expected to review and abide by the Academic Integrity Policy. Do not hesitate to ask the instructor if you are even in doubt about what constitutes plagiarism, cheating, or any other breach of academic integrity.

Accomodations

To obtain disability related adjustments and/or auxiliary aids, students with disabilities must contact the instructor and Disability Resources and Educational Services (DRES) as soon as possible. To contact DRES, you may visit 1207 S. Oak St., Champaign, call 333-4603, email disability@illinois.edu, or go to the DRES website [online].

Emergency Response
Emergency response recommendations can be found at: https://police.illinois.edu/emergency-preparedness/.

Privacy

Any student who has suppressed their directory information pursuant to the Family Educational Rights and Privacy Act (FERPA) should self-identify to the instructor to ensure protection of the privacy of their attendance in this course. See https://registrar.illinois.edu/academic-records/ferpa/ for more information.

Covid

Following University policy, all students are required to engage in appropriate behavior to protect the health and safety of the community. Students are also required to follow the campus COVID-19 protocols.

Students who feel ill must not come to class. In addition, students who test positive for COVID-19 or have had an exposure that requires testing and/or quarantine must not attend class. The University will provide information to the instructor, in a manner that complies with privacy laws, about students in these latter categories. These students are judged to have excused absences for the class period and should contact the instructor via email about making up the work.

Students who fail to abide by these rules will first be asked to comply; if they refuse, they will be required to leave the classroom immediately. If a student is asked to leave the classroom, the non-compliant student will be judged to have an unexcused absence and reported to the Office for Student Conflict Resolution for disciplinary action. Accumulation of non-compliance complaints against a student may result in dismissal from the University.

All students, faculty, staff, and visitors are required to wear face coverings in classrooms and university spaces. This is in accordance with CDC guidance and University policy and expected in this class.

Please refer to the University of Illinois Urbana-Champaign’s COVID-19 website for further information on face coverings. Thank you for respecting all of our well-being so we can learn and interact together productively.