

Course: Math 351, MWF 10:10-11:00 Ayres 120

Course Description: This course will teach you the foundations of abstract algebra, including groups, rings, and fields. We will emphasize examples, such as integers, cyclic groups, permutation groups, and polynomial rings. Along the way, we will cover elementary number theory topics like divisibility, factorization, and the Chinese Remainder Theorem. As an upper-division math class, developing and writing clear proofs will be a key component of the course.

Instructor: Prof. Dustin Cartwright

Office Hours: M 1:15-2:15, T 1:30-2:30

Office Location: Ayres 212

Email: cartwright@utk.edu

Text: *A First Course in Algebra* by Joseph Rotman, 3rd edition

Calculator Policy: Calculators are not needed and no calculators or other electronic devices are allowed during exams.

Attendance and Classroom Expectations: I expect you to attend every lecture, pay attention, and participate in discussions. During lectures, you should not be using your laptop, cell phone, or any other electronic devices.

Grades:

- 10% homework
- 5% peer grading
- 5% participation
- 20% first midterm
- 15% second midterm, in-class portion
- 10% second midterm, take-home portion
- 35% final

Homework: Homework is due at the beginning of class each Wednesday. Assignments will be posted on Canvas at least a week in advance.

No late homework is accepted, but I will drop the lowest homework score. If you complete your homework by the due date, but circumstances prevent you from turning it in in person, you may give it to a friend or email me a scanned (not photographed) copy by the beginning of class.

You are *encouraged* to discuss your homework with other people in class. However, you must write up your own solutions and you must acknowledge your collaborators or any other sources used beyond the standard course resources.

Each homework assignment will be graded on the basis of a single sample problem, which will not be announced.

Peer feedback: Each homework assignment (except before a midterm) will have a single problem designated for peer feedback. You will hand in the peer

grading solution on a separate sheet of paper from the rest of the assignment. This solution will be redistributed to someone else in the class, and you will receive someone else's solution. You will read their solution, write respectful and constructive feedback on it, which you will return on Friday. Your grade for this component will depend on the usefulness of your feedback.

Midterms: Make-up exams will only be given with a valid, documented excuse, such as a medical emergency, which should be communicated to me as soon as possible.

- Friday, Feb. 17, in class
- Friday, Mar. 31, in class, with take-home portion due Monday, Apr. 3

The take-home portion of the second midterm must be completed without your peers, the Internet, or any other resources beyond your class notes and the course textbook.

Final: Monday May 8, 8:00am-10:00am, Ayres 120

Grading scale: Each component of your course grade will have a separate grading scale, to be decided after the component is finalized, i.e. the exam is graded, all homework turned in, etc. The cut-offs for the course grading scale will be determined by averaging together the component grading scales according to same proportions as your grades.

Campus Syllabus (includes Disability Services info)