Syllabus for MATH 464/564 Graduate Algebra 2, Spring 2025

Instructor: Dr. Chelsea Walton

Email: notlaw@rice.edu.

Course website: https://math.rice.edu/~notlaw/teaching.html#current

Format: In-person lectures & occasional online lectures if needed. See Teaching Schedule. The assessment towards the final grade will consist of eleven homework sets and two exams.

Lecture Days, Times, and Location: MWF 10:00am-10:50am in HBH 453.

Office Hours: The instructor is available <u>by appointment</u> at M 11:00am–11:50am at 328 HBH (in-person appointments can be made in class on the same day) or by Zoom appointment.

Prerequisite courses: MATH 463/563.

Textbook: Abstract Algebra, Third Edition, by D. Dummit and R. Foote (primary text). See 'Welcome Email' for course material.

Course Objectives: Successful students will gain experience with concepts and methods of abstract algebra at the graduate level, and will develop their skills in the written communication of mathematical ideas. See the Teaching Schedule on the course website for more details on the algebraic structures covered in the course.

Lecture Notes: Lecture notes will be provided via Dropbox after class on the day of lecture. See 'Welcome Email' for Dropbox link.

Assessment, % of Course Grade:

Homework, 60%; Exam 1, 20%; Exam 2, 20%.

See the Teaching Schedule on the course website for assignments and due dates. Students will be responsible for keeping track of their own grades.

Attendance will be taken occasionally. Along with graded assignments, the instructor will take into consideration attendance, participation in class, and growth throughout the semester for assessment needed after the end of the course (e.g., for letters of recommendation).

Homework: There will be 11 homework sets, due by 9:30am *sharp* on the due date. Homework solutions should be submitted through Gradescope; you will receive instructions in the Welcome Email. Each homework set will consist of 6-10 practice problems, along with 1-2 qualifying exam problems. Graded problems will consist of a selection of practice problems and qualifying exam problems.

The lowest homework score will be dropped, so that each homework set is worth 6% of the course grade.

No late homework submissions are allowed.

Each homework score will be out of 10 points, including credit for composition. The use of full sentences, proper grammar, and overall neatness counts towards 'good composition'. See https://math.rice.edu/~notlaw/teaching.html for proof writing tips if needed.

Handwritten, tablet, and Latex solution sets are all acceptable. Students are expected to write up their own solutions, and to acknowledge any references (to theorems, exercises, etc.) and collaborations with peers when pertinent.

Exams: The exams will be held on **Friday**, **February 28th** and **Friday**, **April 18th**. They will be both 50 minute in-class exams and only in-person handwritten solutions are allowed, unless arranged otherwise. Further details will be provided closer to the exam date.

Academic calendar: See: https://registrar.rice.edu/calendars/spring-semester-2025.

Covid-19/ Illness policy: Please keep your classmates safe and healthy by <u>not attending class ill</u> (with Covid-19, a cold, or otherwise). Masks will not be required in class, unless the university mandates a mask policy. Assignment and assessment arrangements for long-term, symptomatic illness will be accommodated.

Disability Accommodation: Any student who has a need for accommodation based on the impact of a disability is very much encouraged to contact the instructor privately to discuss the specific situation. Please do so as soon as possible. Students should also contact Disability Resource Center (DRC) at adarice@rice.edu or 713-348-5841 to obtain a Letter of Accommodation to present to the instructor and to learn about further resources: https://drc.rice.edu/.

Statement on Collegiality, Respect, and Sensitivity: The Department of Mathematics supports an inclusive learning environment where diversity and individual differences are understood, respected, and recognized as a source of strength. Racism, discrimination, harassment, and bullying will not be tolerated. We expect all participants in mathematics courses (students and faculty alike) to treat each other with courtesy and respect, and to adhere to the mathematics department standards of collegiality, respect, and sensitivity (https://mathweb.rice.edu/department-statement-collegiality-respect-and-sensitivity) as well as the Rice Student Code of Conduct. If you think you have experienced or witnessed unprofessional or antagonistic behavior, then the matter should be brought to the attention of the instructor and/or department chair. The Ombudsperson is also available as an intermediate, informal option, and contacting them will not necessarily trigger a formal inquiry.

Title IX Responsible Employee Notification Rice University cares about your wellbeing and safety. Rice encourages any student who has experienced an incident of harassment, pregnancy discrimination or gender discrimination or relationship, sexual, or other forms interpersonal violence to seek support through The SAFE Office. Students should be aware when seeking support on campus that most employees, including myself, as the instructor/TA, are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. For more information, please visit safe.rice.edu or email titleixsupport@rice.edu.