

Syllabus for MATH 463/ MATH 563 Graduate Algebra I, Fall 2023

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 - see Teaching Schedule. The assessment consists of weekly homework sets, one midterm, and one final exam.

Lecture Days, Times, and Location: MWF 9:00AM - 9:50AM in W211 GRB.

Office Hours: By appointment via Zoom.

Prerequisite courses: MATH 356 and 357

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. See 'Welcome Email' for the link.

Assessment, % of Course Grade: Homework, 65%; Midterm Exam, 15%; Final Exam, 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 12 homework sets, due **by 8:30am *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 'practice problems', along with 'advanced problems'. Graded problems will include a selection of practice & advanced problems.

The lowest two homework scores will be dropped— each homework set is worth 6.5% of the course grade. 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.

No late homework or exam submissions are allowed, unless previously arraigned.

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.

Midterm Exam: The midterm exam will be held on **Friday, October 13th**. It will be a 50 minute in-class exam. Only in-person handwritten solutions are allowed, unless previously arraigned. Further details will be provided closer to the exam date.

Final Exam: The date of the final exam is **in the final exam period, tentatively on Wednesday, December 6th**; this will be confirmed later. It will be a 3 hour exam. Further details will be provided closer to the exam date.

Academic calendar: See: <https://registrar.rice.edu/calendars/fall-semester-2023>.

Covid-19/ Illness policy: Please keep your classmates healthy by not attending class ill (with a cold, Covid-19, or otherwise). Wearing masks in class is not required. 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 should contact me privately to discuss the specific situation 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 me 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.