

Math 401: Modern Algebra I

Fall 2026

Marcin Mazur

Office: WH 113

E-mail: mmazur@binghamton.edu

Course web page:

<https://people-math.mathmig.binghamton.edu/mazur/teach/40126/40126.html>

Meeting Time: M, W, F 11:00-12:00 in OH-G102

Office Hours: T 1:15-2:30; W 1:30-2:45 . Also by appointment.

Textbook:

A Book of Abstract Algebra: Second Edition (Dover Books on Mathematics) , by Charles C Pinter.

This course is a 4-credit course, which means that in addition to the scheduled lectures, students are expected to do at least 9.5 hours of course-related work each week during the semester. This includes things like: completing assigned readings and homeworks, studying for quizzes and examinations, and other tasks that must be completed to earn credit in the course.

Course content: This is a first course in abstract algebra. Our main goal is to introduce the concepts of groups and rings and study their basic properties. There will be many proofs done in class, and you will also need to prove results on your own in the homework and provide (simpler) proofs on exams. Note that the order and exposition of the material in class will often differ from the presentation in the book. Additional topics (not covered in the textbooks) may be discussed in class and reading materials other than the textbook may be assigned.

Homework and Classwork: Homework will be assigned regularly. Assignments and corresponding due dates will be posted on the course web page. Solutions will be collected but usually will not be graded. While attempts to solve homework problems will not directly affect grading, they provide the best way to learn the material and to prepare for exams. The number of homeworks attempted and the quality of the attempts will be considered as a factor in determining your course grade if you are a borderline case. Quizzes will be given frequently.

Tests: There will be two tests and the final exam. In addition, there will be quizzes given at least once a week. **No make-up tests or quizzes unless there are some**

extraordinary circumstances. Any such circumstances should be well documented and communicated to your instructor ahead of time.

Any request for special accommodation (for example, from the Services for Students with Disabilities (SSD)) has to be communicated to your instructor ahead of time (ideally at the beginning of the semester).

Dates of the tests:

- Thursday, October 22, 6:30 pm-8:30 pm in WH G002;
- Thursday, December 3, 6:30 pm-8:30 pm in WH G002.

Date of the final exam: TBA.

Grading Policy: The final grade will be based on the test scores, the final exam and the quizzes weighted as follows: each in-class test 20% , the final 45% and the total for all quizzes, homework, and classwork 15%.

Academic Honesty: All students are expected to adhere to the Student Academic Honesty Code.

Final Remarks: You are responsible for attending class, behaving in class, taking class notes, doing homework problems, asking for and coming in for help, etc.; in the end, you are responsible for your success in this class so work hard!

Students are expected to attend every scheduled class. Instructors have the right to deny a student the privilege of taking the final examination or of receiving credit for the course, or may prescribe other academic penalties if the student misses more than 25 percent of the total class sessions. Excessive tardiness may count as absence. [University Bulletin]

Late arrivals, early departures, cell phone conversations, eating, or drinking in class are not appropriate. It is your responsibility to keep informed of all announcements, syllabus adjustments, or policy changes made during scheduled classes and/or posted on course web-page.

Both class attendance and systematic work on the homework problems are crucial for the success in this class.

All the above information is tentative. I reserve the right to make reasonable changes if I find it necessary.