

**Introduction to Abstract Algebraic Systems MATH-430-1070 (11365)  
Fall 2022**

**Instructor: Marta Lewicka**

Office: Thackeray Hall 408, E-mail: lewicka@pitt.edu

Lectures: TuTh 4:00PM - 5:15PM, 316 Old Engineering Hall

Office hours: Tuesdays 5:30PM and by appointment.

**Teaching Assistant: Jesse Roller**

Recitation Session: Thursdays 5:30PM - 6:20PM, OEH00316

**Textbook:** Michael Artin, *Algebra*, Pearson; 2nd edition (August 13, 2010).

Other references: I. Herstein, *Topics in Algebra*, John Wiley & Sons; 2nd edition

D. Foote and R. Dummit, *Abstract Algebra*, Wiley; 3rd edition

T. Hungerford, *Algebra*, Springer; 8th edition

Ch. Pinter, *A Book of Abstract Algebra*, Dover Publications; 2nd edition.

**Prerequisites:** This course is an introduction to Abstract Algebra and covers topics such as groups, rings and fields. Course prerequisite is MATH 0413 or 0450 or 1185. If you do not feel comfortable with the prerequisite material, contact the instructor in the beginning of the course.

**Grades:** Grades will be based on homework (20%), quizzes (10%), two midterms (20% each) and the final exam (30%). Quizzes will take place in-class on a bi-weekly basis. Two lowest quiz grades will be dropped from the total score (this also includes the grade of 0 points in case of absence). There will be no make up midterm exams. If you miss the midterm exam for a \*documented\* medical reason, your grade on it will be the prorated grade of your final exam. Incompletes will almost never be given, and only for cases of extreme personal tragedy.

**Homework:** Weekly homework assignments will be collected at the beginning of the lecture every Thursday, starting in the second week of the instruction. Late homework will not be accepted. There will be five problems assigned each week and their solutions will be evaluated in the scale 0-5 points, taking into account correctness, clarity and neatness of presentation. Solutions should be written up independently.

**Grading scale:** A/A-: 90-100%, B/B±: 70-89%, C/C±: 50-69%, D/D±: 40-49%.

**Academic Integrity:** Students are expected to conduct themselves according to the highest ethical standards. Violations of the code will be dealt with seriously. Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity will incur a minimum sanction of a zero score for the quiz, exam or paper in question. Additional sanctions may be imposed, depending on the severity of the infraction.

**Calendar:**

30 Sept (Tue): First Class

4 Oct (Tue): Midterm I

17 Nov (Th): Midterm II

22 Nov (Tue), 24 Nov (Th): Thanksgiving Recess – no class

8 Dec (Th): Last Class

**Final Exam: ???.**