MA 541: Modern Algebra I
Fall 2019

Instructor:	Anna Medvedovsky
Email:	`medved@bu.edu`
Office hours:	*TBA*
Lecture:	TΘ 9:30–11am in MCS B31 (A1)
TF:	*TBA*
Discussion:	M 1:25-2:15pm in PSY B41 (A2)
	T 8-8:50am in CAS 322 (A3)
Text:	Fraleigh, *A First Course in Abstract Algebra*, 7th ed. (2003)
	We will focus on parts I, II, III and VII.
Website	`http://math.bu.edu/people/medved/Teach/541F2019/Land.html`

Overview: MA 541 is a course on *group theory*, which initially developed starting in the late 18th century to describe various symmetries, first of number systems and later of geometric figures. Today group theory is a fundamental tool in many subfields of math. Topics in this course include permutation groups, Lagrange's theorem, homomorphisms, the isomorphism theorems, and the Sylow theorems.

Homework: Weekly problem sets are an essential part of the course! Homework will be due on Tuesdays, either in class or by 5pm at a drop-off location. You are allowed and encouraged to work together on problem sets, but you must hand in solutions which are written in your own words. Selected problems from each problem set will be graded and returned to you the following week.

Exams: The course includes a short in-class quiz, a take-home midterm, and a university-scheduled final exam.

- **Quiz:** On Tuesday, October 1, we will have a 30-min in-class quiz.
- **Midterm:** On Tuesday, October 22, I will hand out a take-home midterm, which will be due at the start of class on Tuesday, October 29. You are not allowed to work together on the midterm.
- **Final exam:** The final exam for MA 541 is scheduled for 9-11am on Tuesday, December 17.

Grading: Your final grade will be computed using the following breakdown:

- Quiz: 10%
- Midterm: 30%
- Final: 30%
- Homework: 25%
- Instructor discretion: 5%

The bottom *two* homework grades will be dropped in computing the homework average.

How to get help: You're very much encouraged to attend my office hours to ask questions about lecture or homework. Our TF will also both run weekly discussion sections and hold office hours. Additionally, there are two outside math help resources.

- In MCS B24 at most times during working hours, there are graduate students available to answer questions. See
  `http://www.bu.edu/math/undergraduate/resources/tutoring-room-schedule/`
  for details.
- On Tuesdays 7-10pm Prof. Wayne Snyder runs Math Help Night in the Cinema Room of Rich Hall on West Campus. You do not need to live on West Campus to attend.