

**Math 506A–Modern Algebra**

**Spring 2024**

**MWF 10:30, PDL C-38**

**Instructor:** Monty (or William) McGovern, PDL C-450, mcgovern@math.washington.edu

**Office Hours:** Th 9:30 and by appointment.

**Text:** *Abstract Algebra*, by Dummit and Foote (3d ed., Wiley, 2004) (recommended).

**Prerequisite:** Math 505 or instructor permission.

**What to Expect:** This is the third quarter of the first-year graduate algebra sequence. I will pick up where Julia left off last quarter, starting with canonical forms of matrices (Chapter 12 of Dummit and Foote) and continuing with representations of finite groups (Chapters 18 and 19). I will then do some commutative algebra, laying the foundations for later study of algebraic geometry. Homework will be due every Friday and submitted on Gradescope. There will be a final exam but no midterm this quarter. The course grade will be based 50% on homework and 50% on the final. I will post notes for all lectures on Canvas.