

Notes on Abstract Algebra

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Lecture notes from Math 541 Modern Algebra I, Fall 2025.

Reference:

- Dummit and Foote, Abstract Algebra, 3rd edition
- lectures by prof. Mikhail Ivanov

Contents

<i>Midterm 1 Cutoff</i>	2
Chapter 1	3
Chapter 2	3
2.4	3
2.5	3
Chapter 3	4
3.1	4
3.2	4
3.3	4
3.5	4
Chapter 4	5
4.1	5
4.2	5
4.3	5
4.4	5
Chapter 5	6
5.1	6
5.2	6
<i>Midterm 2 Cutoff</i>	6

Midterm 1 Cutoff

Chapter 1

Chapter 2

2.4

Midterm 2 coverage: 2.4, 2.5, 3.1, 3.2, 3.3, 3.5, 4.1, 4.2, 4.3, 4.4, 5.1, 5.2

2.5

Chapter 3

3.1

3.2

3.3

3.5

Chapter 4

4.1

4.2

Groups acting on themselves by left multiplication – Cayley's Theorem

- Le

4.3

4.4

Chapter 5

5.1

5.2

Mittern 2 Cutoff