

Math 320: Abstract Algebra (Fall 2023)
Lecture Schedule

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Below is a list of the topics we intend to cover, along with a rough schedule. Actual schedule is subject to change without notice. Last updated December 3, 2023.

Week	Topic	Chapters
8/21 – 8/25	Overview of Syllabus Review of Proofwriting	
	Integers and Modular Arithmetic	
8/28 – 9/1	The Division Algorithm	1.1
	Greatest Common Divisors	1.2
9/4	<i>Labor Day: No Classes</i>	
9/5 – 9/8	Primes and Unique Factorization	1.3
9/11 – 9/15	Modular Arithmetic	2.1
	Rings	
*9/18 – 9/22	Rings	3.1, 2.2
*9/25 – 9/29	Basic Properties of Rings	3.2, 2.3
10/2 – 10/6	Arithmetic in Rings	3.2
10/9 – 10/13	Isomorphisms and Homomorphisms	3.3
10/16 – 10/20	Exam Review	
	Midterm Exam: Thursday, October 19	
	Polynomials and Quotient Rings	
*10/23 – 10/27	Polynomial Rings and Divisibility	4.1, 4.2
10/30 – 11/3	Irreducibles, Unique Factorization, and Roots	4.3, 4.4
11/6 – 11/9	Congruence Classes in $F[x]$	5.1, 5.2
11/10	<i>Veteran's Day: No Classes</i>	
11/13 – 11/16	Quotient Rings	6.1, 6.2, 6.3
11/20 – 11/22	Applications of Quotient Rings	
11/23 – 11/24	<i>Thanksgiving Break: No Classes</i>	
	Groups	
*11/27 – 12/1	Groups and Symmetries	7.1, 7.2
*12/4 – 12/8	Review for Final Exam	