

Abstract Algebra (Math 470) Fall 2022 Schedule

MW 4 pm to 5:15 pm in Markstein Hall

Text: Contemporary Abstract Algebra 9th Edition by Joseph A. Gallian

September 2022						
◀ August						October ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Aug. 29 First Day of Classes Introductions and expectations What is Abstract Algebra?	Aug. 30	Aug. 31 Ch. 0: Preliminaries	1	2	3
4	5 Labor Day, no class	6	7 Ch. 1: Intro to Groups. Examples	8	9 Homework 1 Due	10
11	12 Ch. 2: Groups. Elementary Properties	13	14 Ch. 2: Groups. Elementary Properties	15	16	17
18	19 Ch. 2: Groups. Elementary Properties	20	21 Ch. 3: Finite Groups; Subgroups	22	23 Homework 2 Due	24
25	26 Quiz 1 Ch. 3: Finite Groups; Subgroups	27	28 Ch. 4: Cyclic Groups	29	30	

October 2022						
◀ September						November ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Sept. 26 Quiz 1 Ch. 3: Finite Groups; Subgroups	Sept. 27	Sept. 28 Ch. 4: Cyclic Groups	Sept. 29	Sept. 30	1
2	3 Ch. 5: Permutation Groups	4	5 Ch. 6: Isomorphisms (and a bit about Homomorphisms)	6	7 Homework 3 Due	8
9	10 Ch. 6: Isomorphisms (and a bit about Homomorphisms)	11	12 Ch. 7: Cosets and Lagrange's Theorem	13	14	15
16	17 Ch. 7: Cosets and Lagrange's Theorem	18	19 Ch. 8: External Direct Products	20	21 Homework 4 Due	22
23	24 Quiz 2 Ch. 9: Normal Subgroups and Factor Groups (Quotient Groups)	25	26 Ch. 9: Normal Subgroups and Factor Groups (Quotient Groups)	27	28	29
30	31 Ch. 10: Group Homomorphisms					

November 2022						
◀ October						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Oct. 31 Ch. 10: Group Homomorphisms	1	2 Ch. 10: Group Homomorphisms and Statement of the Fundamental Theorem of Finite Abelian Groups	3	4 Homework 5 Due	5
6	7 <u>Primary Source Project: Holder's Quotient Group Concept</u>	8	9 <u>Primary Source Project: Holder's Quotient Group Concept</u>	10	11 Veterans Day, no class	12
13	14 Ch. 12: Introduction to Rings	15	16 Ch. 12: Introduction to Rings	17	18 Homework 6 Due	19
20	21 Quiz 3 Ch. 13: Integral Domains	22	23 Ch. 14: Ideals and Factor Rings (Quotient Rings)	24 Thanksgiving holiday, no class	25 Thanksgiving holiday, no class	26
27	28 Ch. 14: Ideals and Factor Rings (Quotient Rings)	29	30 Ch. 15: Ring Homomorphisms			

December 2022						
◀ November						January ▶
Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Nov. 28 Ch. 14: Ideals and Factor Rings (Quotient Rings)	Nov. 29	Nov. 30 Ch. 15: Ring Homomorphisms	1	2 Homework 7 Due	3
4	5 Ch. 16: Polynomial Rings	6	7 Ch. 16: Polynomial Rings	8	9 Homework 8 Due Last day of classes	10
11	12 Final Exam 4-6 pm in Markstein Hall 208	13	14	15	16	17
18	19	20	21	22 Grades due from instructors	23	24
25	26	27	28	29	30	31

Possible Grading Scheme

Homework	25%
Primary Source Project	15%
Quiz 1	10%
Quiz 2	15%
Quiz 3	15%
Final	20%

A possible final Primary Source Project is an option: [Dedekind and the Creation of Ideals](#)