

Math 505: Abstract Algebra I

Spring 2019

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Office Hours	JM: MWF 11:00am-12:00pm or by appt. EJ: TuTh 11:00am-1:00pm
Textbook	"Abstract Algebra," by Dummit & Foote, 3 rd edition, Wiley, 2003

Content

In this class we will make a thorough study of modules and vector spaces, the theory of fields and roots of polynomials, homological algebra, plus a little category theory.

Referring to the text, we will cover most of Appendix II and Chapters 10-14, other topics from Chapters 15, 17, and 18 as time allows.

Assessment

There will be 7 bi-weekly homework assignments – your lowest score will be dropped. While you are encouraged to work with the other students, it is important that you write up your solutions independently. I don't want to see multiple papers that are carbon copies of each other. It is very important that you do the homework conscientiously and consistently.

We will have a take-home midterm and a take-home final exam.

Course Websites

Grades and homework will be available via Canvas. There is a tentative schedule below.

Grading scheme

Homework	60%
Midterm Exam	15%
Final Exam	25%

Disability Accommodations

If you have a documented disability and anticipate needing accommodations in this course, please make arrangements to meet with me soon. Please request that a Disability Resources staff send a SAAR form verifying your disability and specifying the accommodation you will need.

Tentative Schedule

Week (week of)	Monday	Wednesday	Friday
1 (January 14)	App. II	App. II	10.1
2 (January 21)	No Class	10.2	10.3
3 (January 28)	10.4	10.4	10.5
4 (February 4)	10.5	11.1,11.2	11.3,11.4
5 (February 11)	11.5	11.5	12.1
6 (February 18)	12.1	12.2	12.3
7 (February 25)	12.3	13.1	13.2
8 (March 4)	13.4,13.5	13.6	14.1
9 (March 11)	14.2	14.2	14.3
10 (March 18)	Spring	Break	Week
11 (March 25)	14.3	14.4	14.5
12 (April 1)	14.6	14.6	14.7
13 (April 8)	14.7	14.8	14.9
14 (April 15)	Selections from	Chapter	15
15 (April 22)	Selections from	Chapter	17
16 (April 29)	Selections from	Chapter	18
17 (May 6)	Final	Exam	Week