

MAS 4302: Abstract Algebra 2

Spring 2026

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Class meets MWF 10:40–11:30 in Little 235

Office hours

Mondays 12:50–1:40 and Wednesdays 12:50–2:45, or by appointment.

Textbook

Galois Theory (5th Edition) by Ian Stewart

Prerequisite

Abstract Algebra 1 (MAS 4301)

Syllabus

We will cover the basic results and techniques of Galois theory, plus any necessary background in ring theory that was not covered in Algebra 1. Our motivation will be the negative answers that Galois theory provides for several classical problems: One cannot trisect an angle or double a cube using just a ruler and compass, and one cannot solve a general fifth degree equation with a formula that involves just the taking of roots.

Homework

Homework problems will be assigned and collected on a regular basis. You are encouraged to discuss the problems with your classmates, but any work you turn in must be your own. Late homework will not be accepted.

Exams

Friday, February 13, in class

Friday, March 27, in class

Friday, May 1, 7:30–9:30 AM (final)

Grading

The homework will count 30%, the in-class exams will count 20% each, and the final will count 30%. Your grade will be determined by the following scale:

$90 \leq x \leq 100$: A	$85 \leq x < 90$: A–	$80 \leq x < 85$: B+
$75 \leq x < 80$: B	$70 \leq x < 75$: B–	$65 \leq x < 70$: C+
$60 \leq x < 65$: C	$55 \leq x < 60$: C–	$50 \leq x < 55$: D+
$45 \leq x < 50$: D	$40 \leq x < 45$: D–	$0 \leq x < 40$: E

Some other useful information can be found here:

<https://syllabus.ufl.edu/syllabus-policy/uf-syllabus-policy-links/>.