

# Math146 - Abstract Algebra II (Galois Theory) - AY2024-2025 spring

George McNinch

## Lectures

Date	DOW	Desc	Seq	Week	Details
01/15	Wed	Lecture	1	1	Commutative Rings and Fields
01/20	Mon	Tufts		2	<b>No classes:</b> <i>MLK Day</i>
01/22	Wed	Lecture	2	2	Polynomial Rings
01/22	Wed	Tufts		2	<b>Academic Date:</b> <i>Last day to add a course</i>
01/27	Mon	Lecture	3	3	Euclidean algorithm
01/29	Wed	Lecture	4	3	Fields of Fractions & Quotient Rings
02/03	Mon	Lecture	5	4	Gauss Lemma
02/05	Wed	Lecture	6	4	Eisenstein's Criterion
02/10	Mon	Lecture	7	5	Fields and field extensions; linear algebra
02/12	Wed	Lecture	8	5	Simple extensions
02/17	Mon	Tufts		6	<b>No classes:</b> <i>Presidents' Day</i>
02/19	Wed	Lecture	9	6	midterm 1
02/19	Wed	Exam		6	<b>midterm 1</b>
02/19	Wed	Tufts		6	<b>Academic Date:</b> <i>Last day to drop a course without record</i>
02/20	Thu	Lecture	10	6	Degree of extensions and the Tower Law
02/20	Thu	Tufts		6	<b>Tufts:</b> <i>Monday schedule</i>
02/24	Mon	Lecture	11	7	Primitive element theorem
02/26	Wed	Lecture	12	7	Ruler & Compass constructions
03/03	Mon	Lecture	13	8	Ruler & Compass & impossibility proofs
03/05	Wed	Lecture	14	8	The Galois Group and some of its uses
03/10	Mon	Lecture	15	9	Splitting fields
03/12	Wed	Lecture	16	9	Normal field extensions
03/15	Sat	Tufts		9	<b>No classes:</b> <i>Spring Break</i>
03/16	Sun	Tufts		9	<b>No classes:</b> <i>Spring Break</i>
03/17	Mon	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/18	Tue	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/19	Wed	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/20	Thu	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/21	Fri	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/22	Sat	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/23	Sun	Tufts		10	<b>No classes:</b> <i>Spring Break</i>
03/24	Mon	Lecture	17	11	Separable field extensions
03/26	Wed	Lecture	18	11	The Galois Correspondence
03/31	Mon	Lecture	19	12	midterm 2
03/31	Mon	Exam		12	<b>midterm 2</b>
04/02	Wed	Lecture	20	12	Linear independence of monomorphisms
04/02	Wed	Tufts		12	<b>Academic Date:</b> <i>Last day to withdraw from a course with W</i>
04/02	Wed	Tufts		12	<b>Academic Date:</b> <i>Last day to select Pass/Fail Option</i>
04/07	Mon	Lecture	21	13	Some results on automorphisms
04/09	Wed	Lecture	22	13	The fundamental Theorem of Galois Theory
04/14	Mon	Lecture	23	14	Examples of Galois Groups
04/16	Wed	Lecture	24	14	Finite Fields

Date	DOW	Desc	Seq	Week	Details
04/21	Mon	Tufts		15	<b>No classes:</b> <i>Patriots' Day</i>
04/23	Wed	Lecture	25	15	Transcendence degree; symmetric polynomials
04/28	Mon	Lecture	26	16	Solutions by radicals
04/29	Tue	Tufts		16	<b>No classes:</b> <i>Makeup Day (no classes)</i>
04/29	Tue	Tufts		16	<b>Academic Date:</b> <i>Reading Period</i>
04/30	Wed	Tufts		16	<b>Academic Date:</b> <i>Reading Period</i>
05/01	Thu	Tufts		16	<b>Academic Date:</b> <i>Reading Period</i>
05/02	Fri	Tufts		16	<b>Academic Date:</b> <i>Final Exam Period</i>
05/03	Sat	Tufts		16	<b>Academic Date:</b> <i>Final Exam Period</i>
05/04	Sun	Tufts		16	<b>Academic Date:</b> <i>Final Exam Period</i>
05/05	Mon	Tufts		17	<b>Academic Date:</b> <i>Final Exam Period</i>
05/06	Tue	Tufts		17	<b>Academic Date:</b> <i>Final Exam Period</i>
05/07	Wed	Tufts		17	<b>Academic Date:</b> <i>Final Exam Period</i>
05/08	Thu	Tufts		17	<b>Academic Date:</b> <i>Final Exam Period</i>
05/09	Fri	Exam		17	<b>final exam</b>
05/09	Fri	Tufts		17	<b>Academic Date:</b> <i>Final Exam Period</i>