



The Graduate Center of CUNY

Ph.D. Program in Mathematics

Course Description

Spring 2022

Course Title: Algebra II

Course # MATH 70600

Day & Time: MW 12:00-13:30

Instructor Name: Olga Kharlampovich

Contact Information: okharlampovich@gmail.com

Prerequisites: Algebra I

Office Hours: M 13:30-14:30

Mode: In Person

Course Description: TEXT: Abstract Algebra, D. Dummit and R. Foote (Third Edition),
Recommended: Algebra, Hungerford

1. Fields and Galois Theory: Extension fields to the fundamental theorem of Galois Theory and solvability by radicals (Chapters 13,14).
2. Linear Algebra: If not covered in Algebra 1 (Chapters 11.12).
3. Rings: An Introduction to Commutative rings, Algebraic Geometry and Homological Algebra (Chapters 15, 16, 17).
4. Representation theory of finite groups (Chapters, 18, 19)

Your final grade will be Max (100% final exam or (25 % assignments+25% midterm exam + 50 % final exam))