

Math 60710 Syllabus, Fall 2016

Course title: Introduction to Algebraic Geometry

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Textbook: *Algebraic Geometry* by Robin Hartshorne.

Course Description

This course will be an introduction to algebraic geometry, the first part of a year-long sequence. The plan is to cover roughly the first two chapters of the textbook, as well as a number of additional topics as time permits. We'll start with the classical notions of algebraic varieties and morphisms between them in order to develop some intuition, and then migrate towards the more modern (and abstract) language of schemes. The main prerequisite for this course will be graduate algebra, although some basic knowledge of commutative algebra (rings, modules, the notion of Noetherianity) will be useful.

The course grade will be based entirely on homework, which will be assigned roughly every week. You are encouraged to work in small groups, but individual submissions are also welcome. If there is interest, we will organize problem sessions where we present/work through some of the problems.