

Algebraic Geometry

Mondays and Thursdays from 12-1:20 in Hill 425

Professor: Angela Gibney

Email: angela.gibney@gmail.com

Office hours are Friday from 2:15-3:15 pm, in HLL 230, and by appointment.

Course topics:

Text: I'll use Joe Harris *Algebraic Geometry* to set the schedule, and a variety of other sources as well.

I'm planning 27 lectures with the following topics. I expect the timing and choice of topics will change slightly as the semester progresses.

date	Monday	Thursday
(09/05)	no class	varieties, part I
(09/09, 09/12)	varieties, part II	regular functions and maps, part I
(09/16, 09/19)	regular functions and maps, part II	cones, projections, products
(09/23, 09/26)	families and parameter spaces, part I	families and parameter spaces, part II
(09/30, 10/03)	ideals of varieties, part I	ideals of varieties, part II
(10/07, 10/10)	Grassmannians and related varieties, part I	Grassmannians and related varieties, part II
(10/14, 10/17)	rational functions and rational maps, part I	no class
(10/21, 10/24)	dimension, part 1	dimension, part 2
(10/28, 10/31)	dimension part 3	tangent space part 1
(11/04, 11/07)	tangent space, part 2	tangent space, part 3
(11/11, 11/14)	tangent space, part 4	Blowing up
(11/18, 11/21)	More on blowing up	Even more on blowing up
(11/25, 11/28)	Line bundles	no class (Thanksgiving)
(12/02, 12/05)	moduli spaces, part I	moduli spaces, part II
(12/09)	moduli spaces, part III	

Homework Suggested problems will be given daily.