Time: Tuesdays and Thursdays 9:30–10:50
Room: TBA
Instructor: Sheldon Katz
Text: Algebraic Geometry, R. Hartshorne, Graduate Texts in Mathematics 52, Springer NY 1977
Prerequisites: Modern Algebraic Geometry I (Math 512) or equivalent, or permission of the instructor

This full-semester course will begin by covering most of the content of Chapter III of Hartshorne’s text, especially derived functors and cohomology. The course will include extensive applications, following student and instructor interests. The text will be frequently supplemented with additional materials designed to enhance geometric intuition, and the treatment in class will often diverge from the text.

Students will submit a semester paper on a related topic of their choice subject to approval of the instructor.

Homework will not be assigned, although students are encouraged to work on the extensive collection of problems at the end of each section.