Instructor: Sheldon Katz

Time and venue: TuTh 9:30-10:50. All classes will be held online until further notice. During those times, you can join the class at the URL https://illinois.zoom.us/j/635073968. Requires Zoom and authentication.

Online office hours: Mondays 1:00-1:30 at the URL https://illinois.zoom.us/j/432272626 and Thursdays 2:00-2:50 at the URL https://illinois.zoom.us/j/613398876, or by appointment. Requires Zoom and authentication. In-person office hours are suspended until further notice.

Instructor contact information: 265-6258, katz@math.uiuc.edu

Prerequisites: Modern Algebraic Geometry (Math 512) or equivalent, or permission of the instructor

Text: R. Hartshorne, Algebraic Geometry, Graduate Texts in Mathematics 52

Course website: http://www.math.uiuc.edu/~katz/class/s20/

Course Description: The focus will be on Chapter III (derived functors and cohomology in particular) and applications to selected topics about curves (Chapter IV) and surfaces (Chapter 5).

The text will be frequently supplemented with additional materials designed to enhance geometric intuition.

Lectures will parallel the topics in the text but the treatment will not always be the same.

Grading: Will be friendly and based on classroom participation.