



The Graduate Center of CUNY
Ph.D. Program in Mathematics
Course Syllabus

Course Title: Algebra II: Introduction to Algebraic Geometry and Number Theory

Course #: MATH 87000

Time and Location: Wed. 2:00PM - 4:00PM

Instructor Name: Lucien Szpiro

Contact Information: lszpiro@gc.cuny.edu

Pre-Requisites: TBA

Office Hours: TBA

Description:

We will use the cohomology theories to study Curves and Surfaces their line bundles and and the Riemann-Roch Theorems. We will compare with the theory of the Class Group for number fields, We illustrate the principle "take numbers as functions".

References:

Hartshorne Algebraic Geometry Springer

Eisenbud Harris Introduction to schemes

My notes on my web page : Arithmetical Algebraic Geometry

The students will be asked to give talks during the class