FALL 2015 ALGEBRA II CLASS

LUCIEN SZPIRO

This course will be an introduction to Algebraic Geometry and a comparison to Algebraic Number Theory. We will try to treat in parallel function fields and number fields.

The topics:

- Schemes
- Cohomology of coherent sheaves
- The Jacobian and the Class group
- Riemann Roch Theorem for Algebraic curves
- Functions fields and Number fields

The bibliography:

- R. Hartshorne “Algebraic Geometry” Springer
- “Arithmetic Geometry” My notes in English and French on my web page