FALL 2012

**MATH 83530: Algebra II [18716]**

W, 2:00pm - 4:00pm, Rm. TBA

Prof. L. Szpiro

3 cr.

This class will introduce students to research in Algebraic Geometry and Number Theory.

The necessary commutative algebra will be studied. Number fields; Function field of a Curve; Class group and Picard group; Theory of heights for number fields and function fields; Self maps of projective space; preperiodic points; canonical height.

Books:

Hartshorne: *Algebraic Geometry*

Hindry, Silverman: *Diophantine Geometry an introduction*

Silverman: *Arithmetic of Dynamical Systems*