

Syllabus
Mathematics 8300, Introduction to Algebraic Geometry
73rd period: 11:00am-12:15pm, Tuesday and Thursday
Fall 2006
Professor: Elham Izadi

Office: Room 503 in the Boyd Graduate Studies Building

Office phone: 542-2615

e-mail: izadi@math.uga.edu

Office hours: Monday 1:00-2:30 pm, Wednesday 1:00-2:30 pm.

Pre-requisite: The prerequisite for this course is a good knowledge of algebra and topology, preferably MATH 8000 but that is not strictly necessary.

References: • *Basic algebraic geometry* by Igor R. Shafarevich.

- *Algebraic geometry* by Robin Hartshorne.
- *An invitation to algebraic geometry* by Karen Smith, Lauri Kahanpää, Pekka Kekäläinen, William Traves.
- *Principles of algebraic geometry* by Phillip Griffiths and Joseph Harris.
- *Complex algebraic surfaces* by Arnaud Beauville.
- *Algebraic geometry, a first course* by Joseph Harris.
- *Introduction to commutative algebra* by Michael Atiyah and Ian McDonald.
- *Commutative algebra* By H. Matsumura.
- *Commutative Algebra with a view toward algebraic geometry* by David Eisenbud.

Objectives: This course will introduce the basic foundations of algebraic geometry. We will define and study algebraic varieties and some of their properties. We will study many examples. Participation in the VIGRE algebraic geometry group is recommended.

Academic honesty: The University of Georgia recommends that the following be included in all syllabi. “All students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academic careers. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense.”

The University’s academic honesty policy can be consulted on the world wide web at http://www.uga.edu/ovpi/honesty/culture_honesty.htm

Sections 5 and 7 are of special importance.

Statement: The course syllabus provides a general plan for the course; deviations may be necessary.