MATH 6395 – Introduction to Complex Analysis and Geometry – Spring 2013
Syllabus

Instructor: Dr. Gordon Heier
Contact Information:
    Office: 666 PGH
    Office Hours: Tu 2:30pm-3:20pm, W 2:00pm-2:50pm, or by appointment
    Email: heier@math.uh.edu
    Web: www.math.uh.edu/~heier and www.math.uh.edu/~heier/teaching.html

Lecture: TuTh 1:00pm-2:30pm, Room: AH 301

Prerequisites: Math 6322-6323, or equivalent

Exams: Midterm Exam: take home exam, to be worked on March 26 – April 02
    Final Exam: take home exam, to be worked on April 30 – May 09

Texts: Principles of Algebraic Geometry, by Griffiths-Harris (recommended)
    Algebraic Geometry--A First Course, by Harris (recommended)

Homework will be assigned in the form of "recommended problems" during class. Your solutions are not to be turned in for grading, but these problems serve as your preparation for the exams. Students are encouraged to come to office hours and discuss the recommended problem with me.

Attendance: Attending classes and exams is mandatory for all students. Missing class makes a student liable to missing important information. Substantial documentation is necessary to receive any kind of excuse or make-up privilege.

Grades: The midterm exam and final exam will each account for 50 percent of your grade.

Disability: If you think or know that you have a disability that needs special accommodation, please see me at the beginning of the semester so that the proper steps can be taken.

Academic Dishonesty will not be tolerated and dealt with appropriately.

Course Content: We will discuss various topics in higher dimensional complex geometry, such as: complex manifolds and varieties, sheaves and cohomology, divisors and line bundles, positivity, curvature, vanishing theorems, algebraic curves, Kodaira's classification of surfaces, birational geometry, resolution of singularities, moduli theory.