

**MATH 6352 – Complex Analysis and Geometry I – Fall 2016
Syllabus**

Instructor: Dr. Gordon Heier

Contact Information:

Office: 666 PGH

Office Hours: M 4-5pm, or by appointment

Email: heier@math.uh.edu

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Lecture: MW 1pm-2:30pm, Room: C 109

Prerequisites: Math 6322-6323, or equivalent, or consent of instructor

Exams: Midterm Exam: take home exam, to be worked on October 24 - October 31

Final Exam: take home exam, to be worked on December 1 - December 7

Note: The above exam dates are tentative and subject to change.

Texts: Positivity in Algebraic Geometry I, by Lazarsfeld (not required)

Principles of Algebraic Geometry, by Griffiths-Harris (not required)

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 taking 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: This is the first semester of a two semester introductory course in complex algebraic geometry. Topics to be discussed are: basics of complex analysis, complex manifolds, cohomology, line bundles and divisors, rational and birational maps, compact complex surfaces, intersection theory, Riemann-Roch theorem.