

MATH 510
RIEMANN SURFACES AND ALGEBRAIC CURVES
MWF 10:00–10:50, 441 Altgeld Hall
FALL 2005

Instructor: Sheldon Katz

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Text: Rick Miranda, *Riemann Surfaces and Algebraic Curves*, Graduate Studies in Mathematics, Vol. 5, American Mathematical Society, Providence, RI, 1995

Course website: <http://www.math.uiuc.edu/~katz/class/f05/>

Homework: will be assigned, collected, and graded weekly. You can discuss problems with each other and with the instructor, but solutions must be written up individually. Late homework will be graded with a grade penalty, 25% for up to one week late, 50% for up to two weeks late, etc. Homework turned in after 5pm on the due date will be considered late. Josh Mullet is assisting with grading; if an assignment is turned in outside of class, it needs to be left in his mailbox.

Course Description: This course introduces the student to algebraic geometry over the complex numbers, beginning with the analytic theory. The emphasis will be geometric. I plan to cover the first eight chapters of the text. Lectures will parallel the topics in the text but the treatment will not always be the same. Students are advised to attend the lectures, read the book, and stay on top of the homework.

Grading: Based on homework assignments