

MAT 738 Introduction to Algebraic Geometry, Spring 2015

Instructor: Professor Steven P. Diaz

Office: Carnegie 317C

Office Hours: Tuesday 11:15-12:00 noon, Wednesday 2:30-3:30 pm, Thursday 2:15-3:00 pm.

Office telephone: 443-1583

Email: [spdiaz@syr.edu](mailto:spdiaz@syr.edu)

Text: Algebraic Geometry by Robin Hartshorne, GTM 52, Springer-Verlag.

Final Exam: Tuesday, May 5, 2013 8:00-10:00 am.

I hope to cover Chapter I Sections 1,2,3,4,5,7, Chapter II Sections 1,2, and Chapter III Section 4. Additional material may be covered if time allows.

Requirement for an A: Hand in correct solutions to at least 10 homework problems, including at least one from each of the following sections Chapter I Sections 1,2,3,4,5,7, Chapter II Sections 1,2. You may discuss homework problems with each other (in fact I encourage you to do so); however, you should not hand in a problem unless you feel you contributed to its solution (do not simply copy someone else's solution). You may consult other books or publications except that you may not consult any source that specifically solves problems from the Hartshorne text.

Learning Outcomes: Learn the material in the indicated sections of the textbook. Become familiar with the basic objects in algebraic geometry: algebraic varieties in affine and projective space, Zariski topology, dimension of algebraic varieties, regular and rational maps between algebraic varieties, singular and nonsingular algebraic varieties, tangent spaces to algebraic varieties, basic intersection theory, sheaves, schemes, and cohomology.

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generally are not provided retroactively, please contact ODS as soon as possible. Related link: <http://disabilityservices.syr.edu/faculty-staff/syllabus-statement/>

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