Course Description
Spring 2016
Math 595: Intersection Theory

S. P. Dutta
Tuesday-Thursday: 12:30 – 1:50pm
143 Altgeld Hall

This course is intended to be a two-semester course on Intersection theory as developed by Fulton and MacPherson based on the work of Severi, Segre, Todd, Chevalley, Chow, Samuel, Weil, Grothendieck, et al. The main source will be Fulton's well-known text "Intersection Theory". The goal will be to cover main concepts from chapters 1 through 8, chapter 12, 15, 17 and the proof of generalized Riemann-Roch theorem for algebraic schemes over a field in chapter 18. Towards the end, if time permits, Serre's prescription of intersection multiplicity and Gabber's work will also be presented.

Recommended Text: Intersection Theory by W. Fulton