

Course Schedule - Fall 2008

Mathematics

502 **Commutative Algebra** credit: 4 hours.

Commutative rings and modules, prime ideals, localization, noetherian rings, primary decomposition, integral extensions and Noether normalization, the Nullstellensatz, dimension, flatness, Hensel's lemma, graded rings, Hilbert polynomial, valuations, regular rings, singularities, unique factorization, homological dimension, depth, completion. Possible further topics: smooth and etale extensions, ramification, Cohen-Macaulay modules, complete intersections. Prerequisite: MATH 501 or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
30817	lecture-discussion	N1	10:30 AM - 11:50 AM	TR	room 341 Altgeld Hall	Dutta, S