

Course Schedule - Spring 2008

Mathematics

501 **Abstract Algebra II** credit: 4 hours.

Solvable groups, finite p-groups, semidirect products, Sylow's theorem; Galois Theory, transcendental extensions, separable and normal extensions, finite Galois groups, Theorem of the Primitive Element, Fundamental Theorem of Galois Theory, symmetric Function Theorem, examples, cyclotomic, cyclic and radical extentions; Modules over Arbitrary Rings, exact sequences, projective and injective modules, Tensor products, Matrix rings, Schur's lemma, Wedderburn's theorem on semisimple rings, group algebras, Maschke's theorem; Algebraic Geometry, varieties, morphisms of varieties, Noetherian properties, Irreducible varieties and prime ideals. Prerequisite: MATH 500.

CRN	Type	Section	Time	Days	Location	Instructor
38154	lecture-discussion	B1	09:00 AM - 09:50 AM	MWF	room 445 Altgeld Hall	McCarthy, R