

Course Schedule - Fall 2008

Mathematics

418 ***Intro to Abstract Algebra II*** credit: 3 or 4 hours.

Rings of quotients of an integral domain. Euclidean domains, principal ideal domains. Unique factorization in polynomial rings. Fields extensions, ruler and compass constructions. Finite fields with applications. Modules. Structure theorem for finitely generated modules over principal ideal domains. Application to finitely generated abelian groups and canonical forms of matrices. Introduction to error-correcting codes. 4 hours of credit requires approval of the instructor and department with completion of additional work of substance. Prerequisite: MATH 417 or consent of instructor.

CRN	Type	Section	Time	Days	Location	Instructor
30351	lecture-discussion	G13	03:00 PM - 03:50 PM	MWF	room 143 Altgeld Hall	
30351: 3 hours						
39126	lecture-discussion	G14	03:00 PM - 03:50 PM	MWF	room 143 Altgeld Hall	
39126: 4 hours Instructor Approval Required						