Abstract Algebra
(MATH 3063)
Spring 2009

Professor: Dr. Paul Bailey

Office: WIL 228

Office Hours: MWF 10 am to 11 am; MTWRF 12 noon to 1 am; TTh 1 pm to 2 pm

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Book: *Contemporary Abstract Algebra*, Joseph A. Gallian, 6th edition

Grade Components

Projects:	30%
Quizzes:	20%
Midterms:	30%
Final:	20%

Homework exercises from the textbook will be assigned daily to be completed before the next class. These will not be collected, but they need to be done in a timely fashion to keep up with the course. Questions regarding the homework will be addressed at the beginning of the next lecture.

Occasional projects consisting of sets of challenge problems will be handed out, to be thought about and completed outside of class. Mathematics should be written neatly, and *in complete sentences*.

There will be a quiz almost every Friday. No makeup quizzes will be given *unless arrangements are made before the day of the quiz*.

There will be two midterm examinations and one final examination. The final examination will be scheduled by the university during the week of May 4, 2008.

Course Outline

Week	Beginning	Topic	Chapters
Week 0	Jan 12	Sets and Functions	Notes
Week 1	Jan 19	Preliminaries	0
Week 2	Jan 26	Groups	1, 2
Week 3	Feb 2	Subgroups	3, 4
Week 4	Feb 9	Permutation Groups	5
Week 5	Feb 16	Group Homomorphisms	6, 7, 10
Week 6	Feb 23	Group Products and Quotients	8, 9
Week 7	Mar 2	Rings	12
Week 8	Mar 9	Domains	13
Week 9	Mar 16	Ring Homomorphisms and Ideals	14, 15
Week 10	Mar 23	Spring Break	
Week 11	Mar 30	Polynomial Rings	16, 17
Week 12	Apr 6	Divisibility	17, 18
Week 13	Apr 13	Vector Spaces	19
Week 14	Apr 20	Field Extensions	20, 21
Week 15	Apr 27	Finite Fields	22