

Information on Abstract Algebra

Math 327 (2862) — Math 327Z (2863)

August 29, 2005

TIME OF MEETING: Mon, Wed, & Fri 1:40 – 2:35

PLACE: Earth Science 143

INSTRUCTOR: W. F. Hammond, ES 137A
Phone: 442-4625
Email: hammond @ math.albany.edu
Web: <http://math.albany.edu/~hammond/>
Office hours: Mon. & Wed. 2:45 – 3:30, or by appt.

TEXT: J. Fraleigh, *A First Course in Abstract Algebra*, Addison-Wesley.

PRE-REQUISITE: Math 326

COURSE OBJECTIVE:

This course is an introduction to the most basic concepts of abstract algebra: groups, rings, and fields. The previous course “Classical Algebra” presented the study of groups, rings and fields through a careful analysis of many concrete classical examples.

This course aims toward understanding what is true in the same vein about large precisely defined classes of groups, rings, and fields. For example, every *principal ideal domain* is necessarily a *unique factorization domain* but not conversely.

The process of constructing a new ring from a given ring by passing to “congruence classes” emerges as the general *quotient construction*.

TEST SCHEDULE & GRADING:

Event	Weight	Date
Final examination	100	Tue., Dec. 13, 3:30 – 5:30
Midterm test	50	(est.) Wed., Oct 26, in class
Written assignments (5 @ 10 each)	50	as announced
Occasional quizzes (10 @ 5 each)	50	with little or no notice
Writing Intensive Requirements	—	admission to 327Z by permission
Total weight	250	

ATTENDANCE:

Attendance at class meetings is a *requirement* for passing the course unless the student has been granted a special exception. Unexcused absence may result in failure or grade reduction. There will be no excused absences from tests except for compelling emergencies and religious holidays.

ALTERNATE SOURCES:

G. Chrystal, *Algebra: An Elementary Textbook* (2 vols.), Chelsea.

K. Ireland & M. Rosen, *A Classical Introduction to Modern Number Theory*, Springer.

M. Artin, *Algebra*, Prentice Hall.

N. McCoy & G. Janusz, *Introduction to Modern Algebra*, Allyn & Bacon.