

**Algebraic Systems**  
**Math 331, Spring 2003**

**Class Time and Location:** MWF 12:00-1:00 pm, Room 216, Cupples I

**Textbook:** A First Course in Abstract Algebra, by Joseph J. Rotman

**Instructor:** Xiangdong Xie, 935-8111, xxie@math.wustl.edu

**Office Hours:** MWF 1:00-2:00 pm, Room 108c, Cupples I

**Course Description:** This course is an introduction to number theory and basics of abstract algebra. Topics include: number theory (fundamental theorem of arithmetic, congruence), group theory (group homomorphisms, quotient groups, group actions), rings (polynomials, ring homomorphisms, Euclidean rings, unique factorization).

**Exams:** There will be two midterm exams and a final exam. The tentative schedule is as follows:  
**Exam 1, Feb.14; Exam 2, March 24. Final Exam, May 2, 2003 10:30 AM - 12:30 PM.**

**Homework Policy:** Homework problems will be assigned in each class, but will only be selectively collected and graded. They should be turned in before specified deadline in class. No later homework will be accepted.

**Grades:** The final score and letter grade for the course will be determined as follows. The final exam is worth 400 points, midterm exams 500 points (250 each), and homework and quizzes 100 points, with a total of 1000 points. Your final score is the sum of your scores on exams and homework and quizzes. Your letter grade is then determined by the scale:

- A if final score is at least 850
- B if final score is at least 725 but less than 850
- C if final score is at least 600 but less than 725
- D if final score is at least 500 but less than 600
- F if final score is less than 500