Math 470 Section 1 - Spring 2007
ALGEBRA FOR TEACHERS

Instructor: Dr. Anna L. Mazzucato, Assistant Professor
Office: 324 McAllister
Phone: 863-2036
Email: mazzucat@math.psu.edu
Web page: www.math.psu.edu/mazzucat/math470/
Office hours: Monday 5:45 - 6:45 PM
Thursday 5:15 - 6:15 PM
Wednesday 1-2 PM (for Math 502 students, preferably)

Class meets M W F 04:40 - 05:30 PM in 104 OSMOND.

Course Description: An introduction to algebraic structures and to the axiomatic approach, including the elements of linear algebra. Designed for teachers and prospective teachers.

Prerequisites: You MUST have completed Math 311W to register. Students who have passed Math 435 may not schedule this course.

Textbook (required): A Concrete Introduction to Higher Algebra by Lindsay N. Childs, 2nd Ed., Springer

Topics. The aim of the course is to introduce you to basic concepts of abstract Algebra. We will focus on algebraic properties of integers and polynomial in order to introduce the basic structure of abstract algebra in a familiar and concrete context. We will review Chapter 1 and cover parts of Chapters 2 - 6, 8, and 11. We will also cover a few additional topics from Chapter 14-15 if time allows.

Comments: The course is challenging and you MUST devote to it adequate time and attention, by coming to class regularly, keeping up with reading and homework assignments, taking advantage of office hours. If you fall behind, DO NOT WAIT. Come to office hours immediately to get extra help.
I expect that you read the textbook carefully after each class periods. In fact, it is best to read the book before coming to class. I welcome questions both during and outside class. ALL questions are very useful to both the instructor and the students. I also welcome general feedback about the course. An anonymous feedback form is available on the course web page.

Assignments. There will be weekly homework, consisting of problems usually taken from the textbook. Homework will not be collected. Instead, once a week (or every two
weeks depending on time) on Friday, you will be asked to work out in class a problem from the homework. There will be two in-class midterms, and a comprehensive final exam. Homework assignments and handouts will also be posted on the course web page. The midterms are tentatively set for the week February 19-23, and March 26-30.

Grading:

- HOMEWORK: 100 pts, 20 %
- MIDTERMS: 100 pts, 20% each
- FINAL: 200 pts, 40%
- TOTAL: 500 pts.

Grades will be based on a 10-point scale (for example, %90 = A, %80 = B). The final grade may be curved. Your lowest homework score will be dropped.

Policies: Collaborations on homework problems is allowed and encouraged. NO collaboration is allowed during in-class tests.

NO LATE HOMEWORK will be accepted and there will be NO MAKE-UP EXAMS, unless for documented and valid reasons, such as illness. In this case, you must inform me IN ADVANCE of the test.

Academic Integrity: "Academic dishonesty includes, but is no limited to, cheating, plagiarizing, . . ., facilitating acts of academic dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with academic work of other students. . . . A student charged with academic dishonesty will be given oral or written notice of the charge by the instructor. If students believe that they have been falsely accused, they should seek redress through informal discussions with the instructor, the department head, dean or campus executive officer. If the instructor believes that the infraction is sufficiently serious to warrant the referral of the case to Judicial Affairs, or if the instructor will award a final grade of F in the course because of the infraction, the student and instructor will be afforded formal due process procedures.” From Policies and Rules, Student Guide to the University Policy 49-20.

Based on the University’s Faculty Senate Policy 49-20, a range of academic sanctions may be taken against a student who engages in academic dishonesty.