Mathematics 403A   Winter 2005

Instructor: John Palmieri, Padelford C-538, 543-1785, `palmieri@math.washington.edu`
Class time and place: MWF 9:30, Denny 212
Office hours: Monday 1:30-2:30, Tuesday 10:30-11:30, drop-in, and by appointment
Web page: `http://www.math.washington.edu/~palmieri/Math403/`
Text book: *Algebra* by Michael Artin.

Examinations and grading. I will give weekly homework assignments; there will also be a midterm and a final exam. I will post the homework assignments on the course web page, and they will be due **each Wednesday at 2:30pm**, in my office. The midterm will take place, tentatively, on **Wednesday, February 2**. After I've graded the midterm, you will have a few days to correct some of your mistakes for some extra credit. I'll give you more details as the time approaches. The final exam will take place on **Wednesday, March 16, 8:30–10:20**. You will also prepare a portfolio of homework problems, due on **Friday, March 4**. The midterm is worth 20% of the grade, the final is worth 25%, the homework is worth 35%, and the portfolio is worth 20% (10% for content, and 10% for participation).

Reading and homework. The best way to learn mathematics is to do it, so you should read the book and do the homework problems. I will provide weekly reading assignments, and you can respond to them by sending me a reading report by **Tuesday evening at 8:00 pm**. This report should contain questions (and comments, if you want) about the reading. All together, these reading reports will count the same as one homework assignment; if you do at least five reading assignments, you will get full credit. If you do fewer than five, you will get no credit for this.

Feel free to work with other people on your homework, but you must write your solutions yourself. If you find a solution in a book or some other source, please provide a reference. A good approach for homework is to first try to do a problem on your own, and then if you run into difficulties, you can discuss the confusing issues with your classmates. Of course, you are certainly welcome to ask me or the TA for suggestions.

Portfolio. The portfolio is described on a separate sheet. We will spend a few class days working in groups to discuss these problems, and several times during the quarter, you will peer review each other's solutions. Your participation grade (10% of the total for the course) will be based on your involvement in these activities. The quality of the portfolio (both mathematical and writing) is worth another 10%.

Office hours. Feel free to drop by my office; if I'm there and not talking to someone else, I'm probably available to talk. If I'm not there, email is a good way to contact me, since I check it pretty regularly. I will not be in my office on most Thursdays.

Plan for the course. This quarter, we will be studying ring theory: Chapters 10 and 11 of the book.

Other books. There are lots of fine algebra books out there, and it's often a good idea to look at different approaches to mathematical concepts. I have put two books, *A First Course in Abstract Algebra* by Rotman and *Abstract Algebra* by Herstein, on reserve in the math library (Padelford C-306). See the course web page for a list of other books you might look at.