

MATH 732 WINTER/SPRING 2001

Class Meetings: TuTh 11:05-12:20 in EMS E495A
[Spring break March 18–25; Last class May 10]

Instructor: Allen Bell, EMS E449, 229-4233; e-mail adbell@uwm.edu

Office Hours: TuTh 12:30-2:00 (subject to change)

Other times by appointment: don't hesitate to contact me by phone or e-mail, or to drop in. I teach from 9:30-10:45, so I generally won't be in my office before class.

Web Page: <http://www.uwm.edu/~adbell/> — then follow the link for Math 732.

Text and Topics: The “text” will consist of notes I distribute and post on the web. [Please let me know of any errors or problems in the notes.] A few of the topics are covered in the Math 631–2 textbook *Algebra* by Michael Artin (parts of chapters 10,11,12,13,14), but most are not. The class is *not* designed to follow Artin's book.

We will begin by continuing our exploration of Galois Theory. After that we will study Category Theory and Commutative Ring Theory.

Grades: Your grade will be based on the homework and exams (if there are any). The grading scale will be determined based on the class performance (i.e., there will be a curve). See comments under **Homework** and **Exams** below.

Homework: It is crucial that you do the homework. It is impossible to really learn mathematics without doing problems! In addition, your results on the homework will be far and away the most important factor in determining your grade.

The notes will contain a number of homework problems, both at the end of and in the middle of chapters. Some homework will be collected and graded; you may be asked to present some problems at the board. Most of the problems will not be collected or graded, but we will discuss homework in class whenever you have questions about it, and I encourage you to come to my office hours to discuss homework problems. You are free to discuss homework problems among yourselves, but you *must* do your own work. Please remember: if you don't do it yourself, you won't learn it.

Exams: I anticipate that there will be no exams during the semester, only homework, but I retain the right to change my mind! The final exam is scheduled for Saturday, May 12 from 12:30 to 2:30 p.m.

Other: If you have any special requirements or concerns regarding this course, please let me know as soon as possible. Friday, March 16 is the last day to drop the class (with a W on your transcript) without special approvals.