Syllabus for Math 6303
Modern Algebra II, Spring 2011

Instructor: Dr. Mark Tomforde

Office: 601 PGH

Instructor Web Site: www.math.uh.edu/∼tomforde

Course Web Site: www.math.uh.edu/∼tomforde/Math6303S11.html

Office Hours: By appointment.

Note About Office Hours: I encourage you to come by my office if you have any questions, need help with homework problems, or would just like to talk about the material. To make an appointment, please send me an email.

Meeting Times: MWF 10:00AM–10:50AM in 345 PGH.

Prerequisites: Math 6302 Modern Algebra I.

Course Description: This course is an introduction to modern algebra. Topics include groups, ring, fields, and modules.

It is expected that students will be proficient in reading and writing proofs. Proofs in homework should be written in textbook style. In particular, you should keep the following in mind:

(1) Writing mathematics requires full English sentences, with the understanding that certain mathematical symbols can replace the words they represent. (So, for instance, the phrase "x is a member of the set of real numbers and x^2 is not equal to 4" may be written as "$x \in \mathbb{R}$ and $x^2 \neq 4$".)

(2) When you write up a proof I will grade it for the way it is written as well as the ideas that are in it. Consequently, you should follow the rules of English usage, such as using proper grammar and punctuation.

(3) Your proofs will be graded on the degree to which they are: Correct, Clear, and Concise.

Text: The textbook used for this course is *Abstract Algebra, 3th Edition* by David Dummit and Richard Foote.

Course Web Page: The course web page is located at

www.math.uh.edu/∼tomforde/Math6303S11.html

On the course web page you will find the homework as it is assigned, as well as a copy of this syllabus, exam dates, and announcements as they are made.

Grading: The final grade for the class will be determined as follows:

Class Participation:	10%
Homework:	25%
Exam 1:	20%
Exam 2:	20%
Final Exam:	25%

Attendance: It is vital to attend every lecture and take careful notes. Some lecture material does not appear in the textbook. Questions on the exams will be drawn from homework, reading, and lectures. I also encourage you to ask questions and participate in class. As stated above, 10% of your final grade will be based on class participation. Attendance in class is mandatory, and regularly missing class or regularly being more than 5 minutes late to class will cause you to lose points in class participation.

Homework: A list of homework problems will be given on the course web page every few weeks. With regards to the homework that is turned in, the following policies will be in effect:

- Your homework should contain your name printed clearly.

- Your homework should be stapled in the upper-left-hand corner.

- Each problem should be done on a separate page. Do not use the backs of pages.

- Please remove any paper fringes from notebook paper that is turned in.

- Solutions to homework should be presented in the order they are assigned; i.e, Problem #1 first, Problem #2 second, etc.

- Homework must be turned in at the beginning of class on the day it is due. Late homework will not be accepted.

- Homework that is not picked up within two weeks of the date it is handed back will be discarded.

Doing the homework is essential. Remember . . .

"You learn mathematics by doing mathematics."

Exams: There will be three exams: two midterm exams during the semester and one final exam at the end of the semester. Each exam will be a take-home exam.

Exam 1: Due Wednesday, March 2 at the beginning of class.

Exam 2: Due Wednesday, April 6 at the beginning of class.

Final: Due Friday, April 29 at 10AM.

Makeup Policy: In general, turning in late homework results in a score of zero. Likewise, not turning in a Take-Home Exam when it is due results in a score of zero, and you will not be allowed to make up the work.

No Class: There will be no class on Wednesday, February 2 and Friday, March 11. In both cases I will be out of town speaking at colloquia. Also, the final exam will be given during the last week of class and due on April 29 because I will be out of the country on a research trip at the beginning of May.

Policy on Incompletes: Incompletes are given only in very unusual circumstances, and never just to prevent a bad grade or provide the student with more time to prepare for an exam.

Honor Principal: University of Houston students are expected to adhere to the Academic Honesty Policy (see the Student Handbook for more details). In this course this shall mean the following: Homework can and should be worked on and discussed with others. However, the write-up should be independent and in your own words. In addition, exams should be worked on independently. For take-home exams, you are allowed to use your class notes or talk with the instructor. You are not allowed to use your textbook, homework, outside books, or talk with other people besides the instructor. In addition, if you are aware of anyone who is cheating or receiving unfair

outside assistance, you are honor bound to inform the instructor of what is occurring.

Anyone caught cheating will receive a failing grade in the course and be turned over to the department chair and dean for further disciplinary action.

Special Needs: Any student with a disability or chronic health problem for whom special accommodations would be helpful is encouraged to discuss with the instructor the types of assistance that might be offered.