

Syllabus for MA 362, Spring 2012

Class meetings: MWF 10:00-10:50, CB 337
Instructor: Dr. Bonnie Smith, POT 827, bonnie.smith@uky.edu
Course website: <http://www.ms.uky.edu/~bsmith/MA362>
Office hours: Wednesday 1:00-1:50, Thursday 10:00-10:50, and by appointment
Textbook: *A First Course in Abstract Algebra* (7th edition), John B. Fraleigh

Course Content: This course focuses on algebraic structures called rings and fields, which are sets together *two* binary operations. The material covered will come from Parts IV, V, and VI of the textbook. You will need to be able to work with and prove statements about the abstract structures we encounter, and to communicate your mathematical ideas effectively. This includes writing clear and correct proofs, as well as presenting your work orally to your classmates.

Assessment: Your course grade will be computed according to the following rubric:

Weekly HW, and worksheets	20 %
Weekly HW claim sheets	7.5 %
Class participation/presentations	7.5 %
Exams 1 and 2	20 % each
Final Exam	25 %

- **Homework assignments** will be due each Friday at the beginning of class, and will be posted on the course website a week before they are due. You may turn in *one* homework late without penalty: it must be turned in at the beginning of class, one class after it was due. No credit will be given for additional late homeworks (except in the case of properly documented excused absences).
- **Weekly HW Claim Sheets.** Each homework assignment will contain a number of starred problems, some of which will be presented at the board. At the beginning of class on Friday, in addition to your homework, you will turn in a list (your HW Claim Sheet) of those starred problems for which you believe you have a correct solution, and which you would be able to present to the class. For each problem on your list, you will receive 10 points on your claim sheet grade if the solution is correct in your homework, but *lose* 3 points if the solution is not correct. (The purpose of deducting points is to encourage you to evaluate your solutions and work at being able to distinguish a correct solution from an incorrect one, an important skill.)
- **Participation/Presentations:** To receive full points in this category, you must have good attendance, be an active participant in class (ask and/or answer questions, be a contributing member during group work), and give a satisfactory presentation of a sufficient number of homework problems. I will choose about three of the starred problems from the homework due each Friday, and choose a presenter for a given problem from among those who list it on their claim sheet.
- **Exams** will be cumulative and proof-based. The two midterm exams will have both an in-class and a take-home component; the final exam will be in-class only. Students who miss an exam due to severe illness or another type of documented excused absence should contact me as soon as possible (before the exam if possible). No make-ups will be given for students who miss an exam with an unexcused absence. Dates of exams and sections each exam will focus on will be posted on the course website.