

UNIVERSITY OF DELAWARE
DEPARTMENT OF MATHEMATICAL SCIENCES

M650 Abstract Algebra
Spring 2010

Instructor: G. Ebert
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Office Hours: MWF 2:00 - 3:30 p.m.

Text: *Algebra: A Graduate Course*, I. Martin Isaacs

Syllabus:

- Examples of Groups (Chapter 1): 1 week
- Subgroups and Cosets (Chapter 2): 2 weeks
- Homomorphisms (Chapter 3): 1 week
- New Groups from Old (Chapter 7): 2 weeks
- Rings and Ideals (Chapter 12): 1 week
- Polynomial Rings, PIDs, UFDs (Chapter 16): 3 weeks
- Field Extensions (Chapter 17): 2 weeks
- Finite Fields (Chapter 21): 2 weeks

Grading:

- Collected Homework: 1/3
- Mid Term Take-Home Exam: 1/3
- Final Take-Home Exam: 1/3

Remarks:

- More homework will be assigned than collected. You should do as many homework problems as possible, not just those that are to be graded. This is the best way to learn the material. You may discuss homework problems with one another, but you must write up solutions independently. I am always available for help and hints on the problems.
- On the take-home exams, please work independently. You may use your class notes and the chapters from the text that have been covered, but no other sources (books, friends, internet, etc.)