# MA535 Syllabus

**Instructor:** William J. Martin
**Office:** SH 305A
**Phone:** 831-6764
**e-mail:** martin@wpi.edu
**Office hours:** 3-4pm T, 9-10am F
or by appointment, or just stop by ...

MA 535 – Fall 2015
ALGEBRA
**Text:** "Abstract Algebra"
(3rd ed.) by David Dummit
and Richard Foote
**Meetings:** 5:30 – 8:20 Tues in SH203

This course assumes either previous coursework in abstract algebra at the undergraduate level (basic groups, rings and fields) or a willingness to thoroughly cover such material independently on one's own time.

The course aims to cover, at the introductory graduate level, the following: group theory, including Sylow's Theory and Jordan-Hölder Theory; ring theory emphasizing polynomial rings; the basic theory of modules; the basic theory of fields; Galois Theory. We will proceed roughly at the pace of one chapter per week or two, aiming to cover the fundamental parts of Chapters 2-14.

I will emphasize applications wherever possible, these being chosen according to personal taste.

## SEMESTER SCHEDULE

Here is a very rough outline of how I expect our course to proceed:

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|---|---|
| September | *Group Theory* |
| October | *Ring Theory* |
| November | *Module Theory* |
| December | *Fields and Galois Theory* |

## WORK AND GRADES

Homework will be handed out at most meetings. Selected problem sets will be collected and graded for 25 % of your grade. There will be an in-class mid-term examination on Tuesday, October 13, comprising 25 % of your overall grade. This will be followed an in-class final examination on Tuesday December 15 which will constitute 50% of your grade in the course.

There will be no projects in the course this year.

## ACADEMIC HONESTY

Each student is expected to familiarize him/herself with WPI's Academic Honesty policies which can be found at

All acts of fabrication, plagiarism, cheating, and facilitation will be prosecuted according to the university's policy. If you are ever unsure as to whether your intended actions are considered academically honest or not, please see Professor Martin.

## STUDENTS WITH DISABILITIES

Students with disabilities who believe that they may need accommodations in this class are encouraged to contact the Disability Services Office (DSO) as soon as possible to ensure that such accommodations are implemented in a timely fashion. The DSO is located in the Student Development and Counseling Center and the phone number is 508-831-4908, e-mail is DSO@WPI.EDU

If you are eligible for course adaptations or accommodations because of a disability (whether or not you choose to use these accomodations), or if you have medical information that I should know about, please make an appointment with me immediately to discuss these matters.

## INFORMATION ON THE WEB

The course web page is

http://users.wpi.edu/~martin/TEACHING/current.html