

MATH 371 2017 Algebra Syllabus

Instructor

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TA

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Lectures and labs

Lectures: Mondays, Wednesdays and Fridays, 11 am -12 pm, in DRL 4C8

Labs: Tuesdays and Thursdays, 6.30 pm -8.30 pm, in DRL 4E9

Office hours

Valentijn Karemaker: Wednesdays 12-1 pm, and Fridays 10-11 am, in office 4N55 in DRL

Xiaofei Jin: Thursdays 2-3 pm, and Fridays 5-6 pm, in office 3C15 in DRL

Prerequisites

This course is a continuation of MATH 370, taught by Michael Wibmer in the fall semester of 2016. We will assume you are familiar with the material (on group theory) covered in that course. We will also assume you have taken a course on linear algebra.

Course description

We will define and study rings, fields and modules, with the aim of eventually obtaining the statement of the Galois correspondence.

Textbook

The lectures will be self-contained, so taking notes is strongly recommended. We will be loosely following Dummit & Foote, "Abstract Algebra" (3rd edition), Chapters 7-14.

Exams, homework, and grading

There will be two midterm exams in class and one final exam.

The midterms will take place on February 13th and March 24th.

The final exam will be on May 4, 9am - 11am.

A new homework assignment will be posted on Canvas each Tuesday before 5pm, which is then due at 5pm the following Tuesday, to be handed in to Xiaofei Jin's mailbox in DRL. Late homework will not be marked. Multiple pages of solutions need to be stapled together before handing in.

The final grade will be based on the midterms (20% each), homework grades (30%) and the final exam (30%).

Special assistance

If you need special assistance, please contact SDS at <http://www.vpul.upenn.edu/lrc/sds/>.