

2023 Spring Course Syllabus

Math 3101.001

Course: Mathematics 3101.001.

Course Title: Topics in Modern Algebra.

Credits: 3.

How this course will be taught: in person.

Time: Lectures TR 2:00 - 3:20pm; Recitations M 8:00-8:50am (Aniruddha Sudarshan).

Place: Wachman 408.

Instructor: Martin Lorenz.

Instructor Office: Wachman 528.

Instructor Email: lorenz@temple.edu

Instructor Phone: 215-204-5013 (e-mail is preferred).

Office Hours: MTR 11-12 and by appointment.

Prerequisites: Math 3098 or permission of instructor.

Course Materials: *Algebra: Abstract and Concrete*, Frederick M. Goodman, Edition 2.6, available online: <http://homepage.math.uiowa.edu/~goodman/algebrabook.dir/algebrabook.html>.

Course Goals: Gain further experience with the concepts and methods of abstract algebra, at the advanced undergraduate level.

Topics Covered: This course is the second part of a two-semester advanced undergraduate sequence (Math 3098/Math 3101) in modern abstract algebra. The ultimate goal of Math 3101 is to provide an introduction to Galois Theory, the study of algebraic properties of roots of polynomials. Requisite topics from ring theory and group theory will also be covered.

Course Grading: Homeworks: 40% total, midterm exams: each 15%, final exam: 30%.

Exam Dates: Midterm #1 is on Thursday 3/2 and Midterm #2 on Thursday 4/20, both 2-3:20pm; the Final is on Thursday 5/4, 1-3pm. All exams will be given in Wachman 408.

Attendance Policy: Attendance in lectures and recitations will be recorded and may be taken into account in borderline grade cases. Office hours may not be used to cover material missed due to unjustified absences.

Homework: Homework (HW) assignments will be posted on the Canvas page of this course. Only legible and timely HW will be accepted. Obvious copies of solutions from the internet or from the work of other students will earn 0 points. The lowest two HW scores will be dropped from the grade calculation.

Exam Policy: All exams are open book/notes.