

The Department of Mathematics

2019–20–A term

Course Name Topics in Field Theory and Galois Theory

Course Number 201.1.4321

Course web page

<https://www.math.bgu.ac.il/en/teaching/fall2020/courses/topics-in-field-theory->

Lecturer Prof. Ido Efrat, <efrat@bgu.ac.il>, Office 106

Office Hours <https://www.math.bgu.ac.il/en/teaching/hours>

Abstract

Requirements and grading¹

Course topics

1. Ordered fields: Hilbert's 17 problem, orderings and preorderings, sums of squares, real closed fields, Artin-Schreier theory
2. Infinite Galois theory: profinite groups, the Galois correspondence in the infinite case
3. Introduction to Galois cohomology

¹Information may change during the first two weeks of the term. Please consult the webpage for updates