# 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 grading[1]

## 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

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