



The Department of Mathematics

2023–24–B term

Course Name Homological Algebra

Course Number 201.2.2091

Course web page

<https://www.math.bgu.ac.il/en/teaching/spring2024/courses/homological-algebra>

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

Abstract

Requirements and grading¹

Course topics

Course Topics:

- .1 Categories and functors: natural transformations, equivalence, adjoint functors, additive functors, exactness.
- .2 Derived functors: projective, injective and flat modules; resolutions, the functors *Ext* and *Tor*; examples and applications.
- .3 Nonabelian cohomology and its applications.

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