

The Department of Mathematics

2024–25–A term

Course Name Basic Concepts in Topology and Geometry

Course Number 201.2.5221

Course web page

<https://www.math.bgu.ac.il/en/teaching/fall2025/courses/basic-concept-in-topology>

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

Abstract

Requirements and grading¹

Course topics

- Topological manifolds. The fundamental group and covering spaces. Applications.
- Singular homology and applications.
- Smooth manifolds. Differential forms and Stokes' theorem, definition of de-Rham cohomology.
- Additional topics as time permits.

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