

# 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://math.bgu.ac.il/en/teaching/fall2025/courses/basic-concept-in-topology-and-geometry>

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

## Abstract

## Requirements and grading<sup>1</sup>

## 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.

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