אוניברסיטת
בן-גוריון בנגב

The Department of Mathematics

2021–22–B term

Course Name Basic notions in geometry and topology 2

Course Number 201.2.0471

Course web page
`https://www.math.bgu.ac.il//en/teaching/spring2022/courses/geometry-topology-2`

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

Abstract

Requirements and grading[1]

Course topics

1. Cohomology: definitions, Universal coefficient theorem, Orientation, Poincare duality, cap and cup products, cohomology ring, Kunneth formula
2. Review of (Smooth manifolds, differential forms, orientability, Stokes theorem), degree of the map, Sard theorem, De-Rham cohomology.
3. Isomorphism between De-Rham cohomology and singular cohomology.
4. (If time permits) additional topics according to the instructor preferences

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