אוניברסיטת
בן-גוריון בנגב

The Department of Mathematics

2021–22–A term

Course Name Geometric infinitesimal calculus 1

Course Number 201.1.1031

Course web page
https://www.math.bgu.ac.il//en/teaching/fall2022/courses/geoemtric-infi-1

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

Abstract

Requirements and grading[1]

Course topics

Open, closed and compact sets in Euclidean space. Matrix norms and equivalence of norms. Limits and continuity in several variables. Curves and path connectedness. Partial and directional derivatives, the gradient and dffierentiability. The implicit, open and inverse function theorems. Largange multipliers. Optimization: the Hessian matrix and critical points. Multivariable Riemann integration: Fubini's theorem and the change of variables formula.

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