אוניברסיטת
בן-גוריון בנגב

The Department of Mathematics

2018–19–B term

Course Name Introduction to Complex Dynamics

Course Number 201.2.5431

Course web page
`https://www.math.bgu.ac.il//en/teaching/spring2019/courses/introduction-to-complex-dynamics-29cc6a83-3054-4420-b527-cb64f1c5648a`

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

Abstract

Requirements and grading[1]

Course topics

.1 Normal families and rational maps.

.2 The Fatou and Julia sets.

.3 Properties of the Julia set.

.4 The structure of the Fatou set.

.5 Periodic points.

.6 Forward invariant components.

.7 The no wandering domains theorem.

.8 Commuting and semiconjugate rational functions.

.9 Introduction to arithmetic dynamics.

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