

The Department of Mathematics

2015–16–A term

Course Name Advanced topics in complex variables

Course Number 201.2.2051

Course web page

[https://math.bgu.ac.il/en/teaching/fall2015/courses/advanced-topics-in-complex-](https://math.bgu.ac.il/en/teaching/fall2015/courses/advanced-topics-in-complex-variables)

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

Abstract

Requirements and grading¹

Course topics

- Some review of complex variables
- Hilbert spaces of analytic functions. General theory
- Bergman space
- Hardy spaces
- Fractional Hardy space and self similar systems
- Bargmann-Fock space and second quantization
- Banach spaces of analytic functions.
- Frechet spaces and Schwartz spaces
- Proof of Riemann's mapping theorem
- Dual of the space of functions analytic in a given open set
- Gelfand triples and applications

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