



The Hebrew University of Jerusalem

Syllabus

Topics in Transcendental Number Theory - 80899

Last update 30-09-2021

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Mathematics

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Dan Mangoubi

Coordinator Email: dan.mangoubi@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Prof Dan Mangoubi

Course/Module description:

Hermite's proof for the transcendence of e .
Lindemann's proof for the transcendence of π .
Siegel's Theory for the transcendence of zeros of solutions to 2nd order ODEs with rational coefficients.

Course/Module aims:

Studying interactions between number theory and Spectral Geometry.

Learning outcomes - On successful completion of this module, students should be able to:

Understanding ideas in transcendental Number Theory with a view towards Spectral Geometry.

Attendance requirements(%):

100

Teaching arrangement and method of instruction:

Course/Module Content:

See course description

Required Reading:

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Additional Reading Material:

Siegel - Transcendental Number Theory

Grading Scheme:

Additional information: