



The Hebrew University of Jerusalem

Syllabus

Fourier Analysis - 80770

Last update 17-03-2018

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: Jonathan Breuer

Coordinator Email: jbreuer@math.huji.ac.il

Coordinator Office Hours: Sunday, 14:00--15:00

Teaching Staff:

Prof Jonathan Breuer

Course/Module description:

Basic Properties of Fourier Series, Convergence of Fourier Series, Applications of Fourier Series, The Fourier Transform, Finite Fourier Analysis

Course/Module aims:

Knowledge of aspects of Fourier analysis

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

On successful completion of this module, students should be able to define basic concepts in Fourier analysis, to prove classical theorems, and solve exercises using tools studied in class.

Attendance requirements(%):

Teaching arrangement and method of instruction: Lecture

Course/Module Content:

Basic Properties of Fourier Series, Convergence of Fourier Series, Applications of Fourier Series, The Fourier Transform, Finite Fourier Analysis

Required Reading:

Fourier Analysis, An Introduction/ Elias M. Stein and Rami Shakarchi; Princeton Lectures in Analysis I. Princeton University Press, Princeton, New Jersey, 2003

Additional Reading Material:

Course/Module evaluation:

End of year written/oral examination 100 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 0 %

Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: