



The Hebrew University of Jerusalem

Syllabus

Analytic Number Theory - 80610

Last update 30-03-2025

HU Credits: 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Mathematics

Academic year: 2025

Semester: 2nd Semester

Teaching Languages: English

Campus: E. Safra

Course/Module Coordinator: Zev Rosengarten

Coordinator Email: zev.rosengarten@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Dr. Zev Rosengarten

Course/Module description:

A thorough introduction to the classical results of analytic number theory

Course/Module aims:

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

Students will learn classical theorems in analytic number theory

Attendance requirements(%):

Teaching arrangement and method of instruction:

Course/Module Content:

Distribution of prime numbers and primes in arithmetic progressions, zeta and L-functions, applications

Required Reading:

Davenport: Multiplicative Number Theory

Additional Reading Material:

Apostol, Introduction to Analytic Number Theory

Grading Scheme:

*Essay / Project / Final Assignment / Home Exam / Referat 50 %
Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 50 %*

Additional information:

