האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

Group Cohomology and its Applications to Number Theory - 80937

Last update 06-09-2021

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: *Dr. Shaul Zemel*

Coordinator Email: *shaul.zemel@mail.huji.ac.il*

Coordinator Office Hours: *By appointment*

Teaching Staff:
Dr. Shaul Zemel

Course/Module description:
Introduction to Group cohomology, and its basic applications in number theory

Course/Module aims:
To learn properties and applications of group cohomology

Learning outcomes - On successful completion of this module, students should be able to:
To know the methods of work with group cohomology

Attendance requirements(%):
0

Teaching arrangement and method of instruction: Lectures

Course/Module Content:
Group cohomology,
Inflation-Restriction sequence,
Herbrandt quotient,
Tate's theorem,
Galois cohomology,
Hilbert's theorem 90,
Brauer group of a field,
The invariant of a division algebra over a local field

Required Reading:
None

Additional Reading Material:
Cassels, Froehlich, ``Algebraic Number Theory''

Serre, ``Local Fields''

Course/Module evaluation:

End of year written/oral examination 0 %
Presentation 100 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:

None