



The Hebrew University of Jerusalem

Syllabus

LIE ALGEBRAS - 80869

Last update 31-12-2018

HU Credits: 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Mathematics

Academic year: 2019

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Prof Aner Shalev

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

Coordinator Office Hours:

Teaching Staff:

Prof Aner Shalev

Course/Module description:

A relatively elementary introduction to Lie Algebras

Course/Module aims:

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

NA

Attendance requirements(%):

Teaching arrangement and method of instruction:

Course/Module Content:

Lie rings and Lie algebras, examples, derivations, ideals, homomorphisms, nilpotent Lie algebras and Engel's theorem, solvable Lie algebras and theorems of Lie and Cartan, semisimple Lie algebras

Required Reading:

NA

Additional Reading Material:

Humphreys: Introduction to Lie Algebras and Representation Theory

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: