האוניברסיטה העברית בירושלים דאוניברסיטה העברית בירושלים דאוניברסיטה העברית בירושלים

Syllabus

## LIE ALGEBRAS - 80869

Last update 10-11-2019

<u>HU Credits:</u> 2

Degree/Cycle: 2nd degree (Master)

Responsible Department: Mathematics

<u>Academic year:</u> 0

Semester: 2nd Semester

Teaching Languages: English and Hebrew

<u>Campus:</u> E. Safra

Course/Module Coordinator: Prof Aner Shalev

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

Coordinator Office Hours:

<u>Teaching Staff:</u> Prof Aner Shalev

## <u>Course/Module description:</u> 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* 

<u>Required Reading:</u> NA

<u>Additional Reading Material:</u> 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: