



## *Syllabus*

### **LIE ALGEBRAS - 80869**

*Last update 10-11-2019*

HU Credits: 2

Responsible Department: Mathematics

Academic year: 0

Semester: 2nd Semester

Teaching Languages: English and Hebrew

Campus: E. Safra

Course/Module Coordinator: Prof Aner Shalev

Coordinator Email: [shalev@math.huji.ac.il](mailto:shalev@math.huji.ac.il)

Coordinator Office Hours:

Teaching Staff:  
Prof Aner Shalev

Course/Module description:  
*A relatively elementary introduction to Lie Algebras*

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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: