



Syllabus

Topics in algebraic structures - 80717

Last update 29-07-2020

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. Ori Parzanchevski

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

Coordinator Office Hours:

Teaching Staff:
Dr. Ori Parzan

Course/Module description:

Continuing the study of modern algebraic structures, following the courses "Algebraic Structures I + II"

Course/Module aims:

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

Appreciate the beauty of twentieth-century algebra

Attendance requirements(%):

Teaching arrangement and method of instruction:

Course/Module Content:

Tentative plan:

Modules over PID

Symmetric and Exterior algebras

Division rings - Quaternion rings, Cyclic algebras, Wedderburn little theorem

Simple rings - Artin-Wedderburn theory, Skolem-Noether theorem

Introduction to Lie groups

Required Reading:

None

Additional Reading Material:

Dummit & Foote - Abstract Algebra

Jacobson - Basic Algebra

Course/Module evaluation:

End of year written/oral examination 90 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 10 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: