



The Hebrew University of Jerusalem

Syllabus

ALGEBRAIC GEOMETRY - 80637

Last update 20-09-2024

HU Credits: 4

Degree/Cycle: 2nd degree (Master)

Responsible Department: Mathematics

Academic year: 2025

Semester: 2nd Semester

Teaching Languages: English

Campus: E. Safra

Course/Module Coordinator: Dr. Borys Kadets

Coordinator Email: borys.kadets@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Dr. Borys Kadets

Course/Module description:

Algebraic Geometry In The Language of Schemes

Course/Module aims:

Algebraic Geometry

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

Algebraic Geometry

Attendance requirements(%):

None

Teaching arrangement and method of instruction: Lecture

Course/Module Content:

Affine and projective schemes, local and global properties, sheaves and cohomology, algebraic curves.

Required Reading:

None

Additional Reading Material:

Hartshorne Algebraic Geometry

Grading Scheme:

Active Participation / Team Assignment 20 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 80 %

Additional information:

Prerequisites: commutative algebra on the level of Atiyah and Macdonald's book.

This course is geared towards master and doctorate students who would like to be proficient in scheme theory.