



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Berkovich spaces - 80738*

*Last update 13-09-2024*

*HU Credits: 3*

*Degree/Cycle: 2nd degree (Master)*

*Responsible Department: Mathematics*

*Academic year: 2025*

*Semester: 1st Semester*

*Teaching Languages: English and Hebrew*

*Campus: E. Safra*

*Course/Module Coordinator: Prof. Michael Temkin*

*Coordinator Email: [michael.temkin@mail.huji.ac.il](mailto:michael.temkin@mail.huji.ac.il)*

*Coordinator Office Hours: by appointment*

*Teaching Staff:*

---

Prof. Michael Temkin

Course/Module description:

Non-archimedean fields, affinoid rings, Weierstrass theory (preparation and division), affinoid spaces, analytic spaces, formal models, curves: semistable reduction theorem, skeleton of a curve, morphisms between curves.

This is an advanced topic course which assumes a basic knowledge of algebraic geometry and scheme theory

Course/Module aims:

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

- Expanding the student's knowledge in the chosen subject.
  - Developing independent learning skills.
  - Acquiring the ability to read advanced mathematical texts.
- Preparation for research

Attendance requirements(%):

100%

Teaching arrangement and method of instruction: Determined between the teacher and the student.

Course/Module Content:

Determined between the teacher and student.

Required Reading:

Determined between the teacher and student.

Additional Reading Material:

---

Grading Scheme:

*Presentation / Poster Presentation / Lecture/ Seminar / Pro-seminar / Research proposal 100 %*

Additional information:

*The composition of the final grade is determined on a case by case basis.*