



## *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:* 0

*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:*

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*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:

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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.*