

The Hebrew University of Jerusalem

Syllabus

INFINITESIMAL CALCULUS (1) - 80131

Last update 04-05-2024

HU Credits: 7

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Mathematics

<u>Academic year:</u> 0

Semester: 1st and/or 2nd Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> E. Safra

<u>Course/Module Coordinator:</u> Yves Godin (Sem. A) / Michael Hochman (Sem. B)

<u>Coordinator Email: yves.godin@mail.huji.ac.il raz@math.huji.ac.il</u> <u>michael.hochman@mail.huji.ac.il</u>

Coordinator Office Hours: By appointment

<u>Teaching Staff:</u> Prof Zemer Kosloff, Prof Chloe Perin, Dr. Yves Godin, Prof Michael Hochman, Ms. Devora Zalaznik, Mr. Shai Keidar, Mr. Asael Reiter, Mr. Tomer Konforty, Mr. Yoav Cohen

<u>Course/Module description:</u> Infinitesimal Calculus in one variable.

<u>Course/Module aims:</u> Introduction to Infinitesimal Calculus of one variable.

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

Feel acquainted with the formal-deductive structure, being able to write proofs and solve problems in mathematical analysis.

Attendance requirements(%):

Teaching arrangement and method of instruction: Self-study before lectures, review and lecture, exercise, review recitation workshop

Course/Module Content:

Real numbers, sequences of real numbers, Limits of sequences, real functions of a real variable, limits of real functions, continuity, derivatives.

<u>Required Reading:</u>

Materials that are uploaded to the course website, as instructed.

<u>Additional Reading Material:</u> N/A <u>Grading Scheme:</u> Written / Oral / Practical Exam 95 % Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 5 %

<u>Additional information:</u> This is the syllabus for the spring semester.

The teaching method may change in the course of the semester, we may return to standard teaching (in-class learning only) or some other combination or format.

The workshops in course 80031 accompany the course (active recitation). Participation in the workshop is not mandatory .

the course grade consists of:

5% for completing homework.

95% exam, into which is incorporated:

Up to 3% for completing HW beyond 80% of the assignments.

Up to 5% for participation in active learning workshops. but contributes up to 5% "Magen" to the exam grade, proportional to the number of sessions the student attends.