

The Hebrew University of Jerusalem Syllabus

TOPICS IN LEARNING THEORY - 67939

Last update 01-08-2023

HU Credits: 2

<u>Degree/Cycle:</u> 2nd degree (Master)

Responsible Department: Computer Sciences

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> English and Hebrew

Campus: E. Safra

<u>Course/Module Coordinator:</u> Amit Daniely

Coordinator Email: amit.daniely@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

Prof Amit Daniely

Course/Module description:

The course will discuss advanced topics in learning theory. This year we will focus on neural network theory

Course/Module aims:

Study modern research techniques and results in learning theory

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

Use the tools covered in class to read and do research in learning theory

<u>Attendance requirements(%):</u>

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Teaching arrangement and method of instruction: Lectures

Course/Module Content:

- 1. Basic Concepts in Learning Theory Generalization and Computational Complexity
- 2. Generalization of Neural Networks
- 3. Computational Complexity of Neural Networks

Required Reading:

None

Additional Reading Material:

None

<u>Grading Scheme:</u>

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 100 %

Additional information: