



Syllabus

Issues on Border of Economics and Computation - 67677

Last update 12-12-2023

HU Credits: 2

Responsible Department: Computer Sciences

Academic year: 0

Semester: 1st Semester

Teaching Languages: English and Hebrew

Campus: E. Safra

Course/Module Coordinator: Prof Moshe Babaioff, Dr. Alon Eden

Coordinator Email: moshe.babaioff@mail.huji.ac.il, alon.eden@mail.huji.ac.il

Coordinator Office Hours:

Teaching Staff:

*Prof Moshe Babaioff,
Dr. Alon Eden*

Course/Module description:

In recent years, especially due to the emergence of the Internet, new research directions combine computational issues with economic and game-theoretic issues. This course will present central results from this border.

Course/Module aims:

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

The students will be able to combine computational and economic considerations, where appropriate.

Attendance requirements(%):

0

Teaching arrangement and method of instruction:

Course/Module Content:

Mechanism design, auctions including combinatorial auctions and ad auctions, "price of anarchy", digital goods, learning in games, potential games, equilibrium computation, and related topics.

Required Reading:

Selected chapter from the book ALGORITHMIC GAME THEORY edited by NISAN, ROUGHGARDE, TARDOS, VAZIRANI published by CAMBRIDGE UNIVERSITY PRESS (free online edition available)

Additional Reading Material:

Grading Scheme:

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

Additional information:

Givat-Ram Campus.

Third year BSc students can register following approval from the course coordinators (email your grade sheet).