

Thinking and Decision Making

Subject area: Industrial Engineering

University:	Technion
Level:	BA all years, MA all years, PhD
Teaching mode:	completely online, at specific time
Instructor(s):	Ido Erev

Short description

The course reviews basic research in behavioral economics, and examines how this research can be used to predict the impact of new technologies and policies.

Full description

The course reviews basic research in behavioral economics, and examines how this research can be used to predict the impact of new technologies and policies. It starts by considering three lines of studies of human decision making. The first focuses on rational economic theory. The second focuses on experiments designed to clarify the way human behavior deviates from the prediction of rational economics theory in simple choice tasks. The third line focuses on the way people learn from experience, and extends the analysis to environments in which rational economic theory cannot be used to derive clear predictions. The second part of the course examines the practical implications of the research reviewed in the first part. It considers the impact of nudges and behavioral mechanism design.

The final grade will be determined by four factors:

10% Class participation (answering question using google form during the classes).

20% Presentations of research/engineering ideas (during the tutorial sessions).

20% Participation in a choice prediction competition

50% Final multiple-choice exam that focuses on predicting choice behavior.

Topics by week

- 1 The impact of money, and the value of the rationality assumption
- 2 Expected utility theory and the Allie's paradox
- 3 The JDM separation assumption, prospect theory
- 4 Probability judgment
- 5 The DE-gap
- 6 Six contradictory deviations
- 7 The potential of Nudges
- 8 The replication crises
- 9 Choice prediction competitions
- 10 Mega intervention studies
- 11 Fake news

- 12 Rule enforcement
- 13 Student presentations and summary

Learning outcomes

Better understanding of the implications of basic research in behavioral economics, and the value of quantitatively model of human decision making

Recommended in particular for students of the following study programmes

Economics, Industrial Engineering, Business/Management

General information

Contact hours per week: 3
Total workload: 70 (in student hours for the whole course)
ECTS credits: 2.5
Language: English

Course start date: 21 March 2023
Course end date: 07 June 2023
Add. info about start date:
Weekly teaching day/time:
Time zone: CET +1 (Estonia, Israel)
Further information:

Prerequisites: Basic programing skills
Activities and methods: Lectures, Exercises, Tutorial sessions
Presence on campus: no

Final examination

Form: written
Date:
Location/format: online
Re-sit possibility: yes

Transcript available: end of semester

Add. info/requirements:

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

Number of places: 30

Minimum participants:

Internal course code: 096617

Contact: erevido@gmail.com

This course is part of the EuroTeQ Engineering University joint course catalogue 2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.