

The Hebrew University of Jerusalem

Syllabus

CRITICAL THINKING - 15010

Last update 02-09-2016

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

<u>Responsible Department:</u> philosophy

<u>Academic year:</u> 0

<u>Semester:</u> 1st Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Mt. Scopus

<u>Course/Module Coordinator:</u> Arnon Levy

Coordinator Email: arnon.levy@mail.hjui.ac.il

<u>Coordinator Office Hours:</u> Tuesdays 2:30-3:30

Teaching Staff:

Dr. Arnon Levy Mr. Yonatan Harel Mr. Tom Lavi Mr. Avraham Munitz Ms. Shahar Hechtlinger Mr. Erez Vasilewsky

Course/Module description:

The course will survey basic tools for analytical thinking, including propositional logic and probability theory, and a number of their applications.

Course/Module aims:

An acquaintance with basic analytical tools and an understanding of the pros and cons of the use formal methods and simple models.

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

- Make use of basic concepts from propositional logic, and apply them to determine validity and soundness of arguments, and to identify various fallacies.

- Make use of basic concepts from probability theory, and apply them in decision theory, causality and other contexts.

<u>Attendance requirements(%):</u> 100%

Teaching arrangement and method of instruction: Lecture, weekly rehearsal sections

Course/Module Content:

- The language of arguments
- Propositional logic
- A taste of predicate logic
- Elements of probability theory
- Decision making
- Causality
- A taste of game theory

[Order of topics subject to change]

<u>Required Reading:</u> No required reading. problem sets will be based on lecture material.

Additional Reading Material:

<u>Course/Module evaluation:</u> End of year written/oral examination 80 % Presentation 0 % Participation in Tutorials 0 % Project work 0 % Assignments 20 % Reports 0 % Research project 0 % Quizzes 0 % Other 0 %

<u>Additional information:</u> Attendance at sections is mandatory, as is submitting problem sets.