

The Hebrew University of Jerusalem

Syllabus

Experimental Psychology - 51301

Last update 05-05-2024

HU Credits: 4

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Psychology

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Eldad Keha

Coordinator Email: eldad.keha@mail.huji.ac.il

Coordinator Office Hours: Needs to be scheduled

Teaching Staff:

Mr. Eldad Keha,
Ms. Shir Berebbi,
Ms. hadar naftalovich,
Mr. matan rubin,
Ms. nitzan attias

Course/Module description:

In this course are learn about ways in which scientific thinking modes allow a better understanding of the world, and hence - critical thinking. Among other things we will discuss research design, problems and failures in research, critical thinking processes, reasoning biases and more.

Course/Module aims:

The purpose of the course is to introduce students to the principles of critical scientific thinking, as well as concepts and basic tools for conducting research.

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

At the end of the course students will be able to write an original research proposal.

In addition they will be able the read scientific papers from a critical perspective, and understand of the threats and failures that characterize various research designs.

Attendance requirements(%):

No mandatory Presence

Teaching arrangement and method of instruction: 2 weekly meetings:

1.5 hr lecture for the full class

1.5 Hours practice meetings in small groups.

Course/Module Content:

- What makes a good theory; History of psychology as a science; experimental approach.*
- From theory to a research question to an and experiment*
- Theory and experiment, experimental and correlational research designs, statistical correlation and causality.*
- experiment: a method to control, experimental vs. quasi-experimental designs.*

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- *Within and between subjects designs, reliability.*
 - *Test- validity: predictive validity, content validity, internal validity*
 - *Integration of information from multiple sources, clinical vs. statistical prediction*
 - *Validity of the research results: internal validity, statistical validity, construct validity, ecological validity.*
 - *reasoning biases: Regression to the mean and perception of randomness*
 - *reasoning biases: persistence of beliefs*
 - *reasoning biases: introspection failures*

Required Reading:

*Beyth-Marom, R (ED). (2001). Research methods for the social sciences, 2nd ed., Tel- aviv: Open University press.
units 1,2,3,6,7.*

Additional Reading Material:

*Beyth-Marom, R (ED). (2001). Research methods for the social sciences, 2nd ed., Tel- aviv: Open University press.
units 4,5,8.*

Grading Scheme:

*Written / Oral / Practical Exam 50 %
Essay / Project / Final Assignment / Home Exam / Referat 45 %
Presentation / Poster Presentation / Lecture/ Seminar / Pro-seminar / Research proposal 5 %*

Additional information:

*Course website:
<https://moodle4.cs.huji.ac.il/hu23/course/view.php?id=51301>*

Research proposal needs to be approved (at early stages of the course)

Written Exam - online alternatives will be explored in case a written exam will not possible.

A grade ≥ 60 is required in both the exam and paper.