



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *INTRODUCTION TO LOGIC FOR COGNITIVE SCIENCES - 6122*

*Last update 22-09-2016*

*HU Credits: 6*

*Degree/Cycle: 1st degree (Bachelor)*

*Responsible Department: cognitive science*

*Academic year: 0*

*Semester: 1st Semester*

*Teaching Languages: Hebrew*

*Campus: E. Safra*

*Course/Module Coordinator: Eliezer Zilberfenig*

*Coordinator Email: [zilberfenig@gmail.com](mailto:zilberfenig@gmail.com)*

*Coordinator Office Hours: Mon*

---

Teaching Staff:

Dr. Eliezer Zilberfenig

Mr.

Ms. Lotem Elber

Course/Module description:

*Introduction to Deductive Logic. Propositional and Predicate Logics; Soundness and completeness; Basic Concepts in the Philosophy of Logic.*

Course/Module aims:

*Getting acquainted with the basic ideas and technics of modern logic. To be able to read texts that use formalizations and formal reasoning, and to make it possible for students to learn more advanced topics in logic and mathematical logic.*

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

*To use Deductive Systems in order to determine the Logical characteristics of propositions and arguments. To analyze arguments and detect fallacies, to recognize normative formal thought.*

Attendance requirements(%):

0

*Teaching arrangement and method of instruction: Frontal lectures*

Course/Module Content:

- 1. Propositional Logic- (Syntax, Semantics, Deduction system, Soundness and Completeness Theorems).*
- 2. First Order Predicate Logic.*
- 3. Introduction to Second Order Logic.*

Required Reading:

None

Additional Reading Material:

*H. Leblanc and W.A. Wisdom, Deductive Logic, Allyn and Bacon, London 1972.*

---

Course/Module evaluation:

End of year written/oral examination 100 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 0 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information: