



The Hebrew University of Jerusalem

Syllabus

Object Oriented Programming for Cognitive Scie. - 6141

Last update 10-09-2024

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Cognitive and Brain Sciences

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Adi Ben Shalom

Coordinator Email: adi.ben-shalom@mail.huji.ac.il

Coordinator Office Hours: See moodle

Teaching Staff:

Ms. Ben- Shalom Adi,
Mr. ASAF RIMON

Course/Module description:

Study object oriented programming basics
using Python

Course/Module aims:

Acquiring programming knowledge

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

Ability to program in Python

Attendance requirements(%):

0

Teaching arrangement and method of instruction: frontal lectures + work in computers labs

Course/Module Content:

Python 3 interpreter, IDLE, basic data types: numbers, characters , boolean
Expressions, variables, I/O, type converters
Sequential data containers: string, list, tuple, range; Mutability
Boolean expressions, comparison ops; and, or, not, if statement
Iterability, loops: for, while
User functions, algorithms design for simple computational problems
Hashability, Unordered data containers: set, dictionary,
Files, modules: string, math, random
Iterators: zip, enumerate
List Comprehension
Basics of oop: classes, objects, methods.

Required Reading:

NA

Additional Reading Material:

Recommended: Google python course : <https://developers.google.com/edu/python/>

Python official documentation:

<http://www.python.org/doc/>

<http://interactivepython.org/courselib/static/thinkcspy/index.html>

<http://cscircles.cemc.uwaterloo.ca/>

<http://www.greenteapress.com/thinkpython/thinkpython.pdf>

http://en.wikibooks.org/wiki/Think_Python

http://files.swaroopch.com/python/byteofpython_120.pdf

<http://www.itmaybeahack.com/book/python-2.6/html/index.html>

<http://learnpythonthehardway.org/book/>

<http://pymbook.readthedocs.org/en/latest/>

Grading Scheme:

Written / Oral / Practical Exam 85 %

Submission assignments during the semester: Exercises / Essays / Audits / Reports / Forum / Simulation / others 15 %

Additional information:

Submission of 9 exercises with a score of "passing" is a condition for eligibility to be tested in the final exam at the end of the course,
And earns 15 points in the final score.

The weight of the final exam in the final grade is 85%. Written exam, two hours.
Written or printed reference material is permitted to be used.