The Hebrew University of Jerusalem

Syllabus

OBJECT ORIENTED PROGRAMMING FOR COGNITIVE SCIE. - 6141

Last update 07-10-2019

HU Credits: *2*

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Cognitive Science

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Dr. Arie Schlesinger

Coordinator Email: [*aries@cs.huji.ac.il*](aries@cs.huji.ac.il)

Coordinator Office Hours: By appointment

Teaching Staff:
  Dr. Arie Schlesinger

Course/Module description:
  Study object oriented programming basics
thru 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 ,
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, frozenset, dictionary, Counter,
Files, modules: string, math, random, Collections, itertools
Comprehension: lists, sets, dictionaries
Iterators: zip, enumerate, generators, genexpressions
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/

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:
  It is required to hand in 2/3 of the programming exercises.