The Hebrew University of Jerusalem

Syllabus

PYTHON1 - 76631

Last update 04-09-2024

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Programming Instruction Unit

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Dr. Roie Knaanie

Coordinator Email: roie.knaanie@gmail.com

Coordinator Office Hours: See moodle

Teaching Staff:

Mr. ASAF RIMON,
Dr. Ofer elior,
Dr. Roie Knaanie

Course/Module description:
Understanding computer programming, learning to program and solve problems using python.

Course/Module aims:
Presenting the computing principles, learning to program in Python.

Learning outcomes - On successful completion of this module, students should be able to:
Understanding the computing principles, ability to program in python, write functions and use python data containers to solve problems using python

Attendance requirements(%):
none

Teaching arrangement and method of instruction: Frontal lectures, in a computer lab, weekly programming assignments. The lessons will be recorded and will be available to all students about 24 hours after each lesson.

Course/Module Content:
Python Interpreter
Variables, statements, expressions, built-in functions
Input/Output, using files
Program execution, from a file, interpreter, compiler
Strings, string functions
Branching and decisions, Boolean expressions, if statements
Defining Functions
Data Containers:
strings, lists, tuples, dictionaries, sets
Nested Data structures Repetitions.
Using text files
List Comprehension

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/
https://greenteapress.com/thinkpython2/thinkpython2.pdf
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.