האוניברסיטה העברית בירושלים THE HEBREW UNIVERSITY OF JERUSALEM



Syllabus

PYTHON FOR EARTH SCIENCES - 76634

Last update 18-08-2019

HU Credits: 2

Responsible Department: Programming Instruction Unit

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Hilla Moshieff

<u>Coordinator Email: Hilamc2@gmail.com</u>

Coordinator Office Hours: By appointment

Teaching Staff: Ms. Hila Moshieff

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:

Understand computing principles and program in Python

<u>Attendance requirements(%):</u>

none

Teaching arrangement and method of instruction: Frontal lectures in a computer lab, weekly programming assignments

<u>Course/Module Content:</u> 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 statement Defining Functions Data Containers, lists, tuples, dictionaries, sets Nested Data structures, Repetitions.

<u>Required Reading:</u> none

<u>Additional Reading Material:</u> 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:

The final grade will be determined by the student's test score at the end of the course. To take the test, the students must submit, on time, at least 8 of the exercises that will be given during the course