The Hebrew University of Jerusalem

Syllabus

PYTHON FOR EARTH SCIENCES - 76634

Last update 18-08-2019

<u>HU Credits:</u> 2

<u>Degree/Cycle:</u> 1st degree (Bachelor)

<u>Responsible Department:</u> Programming Instruction Unit

<u>Academic year:</u> 0

<u>Semester:</u> 1st Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> E. Safra

<u>Course/Module Coordinator:</u> Hilla Moshieff

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

<u>Coordinator Office Hours:</u> By appointment

<u>Teaching Staff:</u>

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

Attendance requirements(%):
  none

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

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 statement
Defining Functions
Data Containers, lists, tuples, dictionaries, sets
Nested Data structures, Repetitions.

Required Reading:
 none

 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:
  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