The Hebrew University of Jerusalem

Syllabus

PYTHON 1 - 71250

Last update 23-09-2022

<u>HU Credits:</u> 3

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

<u>Responsible Department:</u> agro informatics

<u>Academic year:</u> 0

<u>Semester:</u> 1st and/or 2nd Semester

<u>Teaching Languages:</u> Hebrew

<u>Campus:</u> Rehovot

<u>Course/Module Coordinator:</u> Aleks Danov

<u>Coordinator Email:</u> aleks.danov@mail.huji.ac.il

<u>Coordinator Office Hours:</u>

<u>Teaching Staff:</u>

 Ms. Ayana Neta,
Ms. Aleks Danov,
Ms. Hila Moshieff

Course/Module description:
 Students will acquire theoretical and practical knowledge in python programming language and develop an ability to solve complex problems from different fields using python programming language.

Course/Module aims:
 Introduce basic concepts from programming world, develop iterative thinking and ability to formulate programming solution and it's python implementation

Learning outcomes - On successful completion of this module, students should be able to:
 By the end of the course students will
a. identify problems that have programming solutions
b. express programming solution using python programming language

Attendance requirements(%):
 no

Teaching arrangement and method of instruction: Zoom

Course/Module Content:
 Basic concepts
Idle and Spyder environment
Python Interpreter
Scripting and Debugging
Running programs
Variables, statements, expressions,
built-in functions
Input/Output,
Strings, string functions
Program Flow:
Branching and decision making
Boolean expressions,
The if statement
Repetitions, Loops: for and while.
Defining Functions

Data Containers: sequences ,lists, tuples, dictionaries, sets
Working with text files
List Comprehension
Numpy, Pandas, matplotlib

Required Reading:
will appear in moodle

Additional Reading Material:
will appear in moodle

Course/Module evaluation:
End of year written/oral examination 90 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 10 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information:
• The final grade is composed of the following components: Final exam, exercises, tirgul and
"additional" exercises weighted as follows: Exam (80-90%), Exercises (10%), "additional"
exercises (0-10% magen) Tirgul assignments (0-5 points bonus).