

Python for computational sciences (2 CFU)

Coordinator: Giovanni Chillemi

Objectives: The aim of the course is to supply the basic concept of programming for data manipulation and analysis. The course will start from zero knowledge and will introduce to the basic concepts of Python. Examples and practical sessions will be based on solving biological problems but with attention to general concepts of programming and data manipulation. By the end of the course, the participants will have a good understanding of the Python basics and will have acquired the skills to manipulate data files and tables, and to write/execute a python code from python notebooks.

Program:

1	Introduction to python notebooks
2	"Hello world" in Python
3	Variables, Numbers, Strings, and Comments
4	Lists
5	Boolean expression, logical operators and conditional execution (IF statement)
6	Loops
7	Managing files
8	Data manipulation and visualisation in Python

Teaching method: lectures, numerical exercises

Semester: 2nd semester, Academic Year 2021-22.

Final examination: oral exposition of a student problem solution