

PPB17

Programming in Python for Biologists



Nov 27th - Nov 30th 2017

Course Description

Python is a programming language that is ideal for data processing. The course will start from zero knowledge, and will introduce the participants to all the basic concepts of programming such as calculating, repeating things, making choices, reading and writing files, filtering and organising data, program logic and writing larger programs. The examples and practical sessions will mostly focus on managing biological data.

In particular the sessions will cover:

- parsing common file formats (Uniprot, GenBank, PDB, BLAST)
- data retrieval from files and their manipulation
- finding motifs in sequences
- manipulating tables
- plotting data

The course will be highly interactive and the participants will continuously put theory into practice while learning. At the end of the course, the participants will have a good understanding of programming basics and will have acquired the skills to manage bioinformatics database record and data files. Basic Unix/Linux skills will be provided at the beginning of the course. Participants are welcome to bring to the course the "typical" text file that they may need to filter, manipulate or analyse.

Instructors:

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Course website:

<http://gtpb.igc.gulbenkian.pt/bicourses/PPB17>

