**UNIVERSITÀ
DEGLI STUDI
DI PADOVA**

Course unit English denomination	**Basic Course on Programming in Python (Macro Topic 2: Neuroimaging techniques)**
SS	**IINF-05/A**
Teacher in charge (if defined)	Emanuele Di Buccio
Teaching Hours	10
Number of ECTS credits allocated	2
Course period	1st semester Timetable available at https://pnc.unipd.it/phd-neuroscience/teaching-activities/
Course delivery method	☒ In presence ☐ Remotely ☐ Blended
Language of instruction	English
Mandatory attendance	☒ Yes (70% minimum of presence) ☐ No
Course unit contents	• What is Python? • Python Basics • Functions • Control statements and loops • Lists, Tuples, Sets, and Dictionaries • Python Libraries (for data science and data visualization)
Learning goals	• Learn Python data types and data structures. • Write a Python program able to read data from a file, process the data through a function or a set of functions, and write the result in a file. • Create (data) visualizations in Python
Teaching methods	Lectures, project work, use of technological tools (e.g. software, wooclap quiz), active participation of students in class, oral presentations, written papers.
Course on transversal, interdisciplinary, transdisciplinary skills	☐ Yes ☒ No
Available for PhD students from other courses	☒ Yes ☐ No

The course is open to all PhD students, with priority given to PhD students enrolled in the Neuroscience Program. External PhD students will email the Administrative Office (administration.pnc@unipd.it) and they will be contacted in case of vacancies.

Prerequisites (not mandatory)	
Examination methods (if applicable)	Homework and final programming assignment
Suggested readings	Learning material will be made available during the course
Additional information	