UCLouvain

lfial2640

2026

Introduction to Python programming for the humanities

5.00 credits	22.5 h + 15.0 h	Q2

Teacher(s)	Zilio Leonardo ;
Language :	French
Place of the course	Louvain-la-Neuve
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 To plan and develop a sequence of understandable instructions for a computing system to solve a given problem or to perform a specific task. (Programming, DigiComp 3.4) 2 To use digital tools and technologies to create knowledge and to innovate processes and products. To engage individually and collectively in cognitive processing to understand and resolve conceptual problems and problem situations in digital environments. (Creatively using digital technologies, DigiComp 5.3) 3 To organise, store and retrieve data, information, and content in digital environments. To organise and process them in a structured environment. (Managing Data, Information and Digital Content, Digicomp 1.3) 4 Select and use specialized algorithms to solve artificial intelligence tasks related to automatic language processing. 'DigiComp' learning outcomes refer to "The Digital Competence Framework for Citizens (DigiComp 2.2)".
Evaluation methods	June and August/September exam sessions: written work and oral exam. Details about the assessment will be provided on Moodle during the course. The final grade will consist of two integrated parts of equal importance (part 1: written work; part 2: oral exam). A pass in both parts is required to demonstrate the skills and knowledge laid out in the learning outcomes of the course. A failing grade in either of the two parts of the evaluation will result in a failing grade for the whole course.
Teaching methods	Lectures and practical exercises.
Content	This module serves as an introduction to programming and to computational thinking in general. It mixes expository lectures with hands-on activities that aims at teaching students the basics of programming in Python, going from assigning variables to designing more complex functions and interacting with external code libraries. This introductory module also presents the components and dynamics that characterise the Digital Humanities movement, focusing on objects, tools and practices. It will focus in particular on document analysis and digital tools. Students are not required to have previous knowledge of Python or other programming languages. The course will start at the very basic, conducting the students along the semester into more complex problem-solving activities using programming language.
Bibliography	Lectures recommandées pour l'apprentissage de Python et pour une introduction au traitement automatique de texte : • Dawson, M., 2010. Python programming for the absolute beginner (p. 480). Boston, MA: Course Technology. • Karl, B., 2017. Computational Thinking: A Beginner's Guide to Problem-Solving and Programming. Swindon, UK: BCS, The Chartered Institute for IT. • Sweigart, A., 2025. Automate the boring stuff with Python: Practical Programming for Total Beginners. 3rd Edition. No Starch Press.
Faculty or entity in charge	FIAL

Programmes containing this learning unit (UE)

Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Multilingual Communication	MULT2M	5		
Master [120] in French and Romance Languages and Literatures : French as a Foreign Language	FLE2M	5		
Master [120] in Information and Communication Science and Technology	STIC2M	5		
Master [120] in Translation	TRAD2M	5		
Master [120] in History	HIST2M	5		
Master [120] in Linguistics	LING2M	5		
Advanced Master in Visual Cultures	VISU2MC	5		
Master [120] in Ethics	ETHI2M	5		
Master [120] in Philosophy	FILO2M	5		
Master [120] in Modern Languages and Literatures : German, Dutch and English	GERM2M	5		
Master [60] in History of Art and Archaeology : General	ARKE2M1	5		
Master [120] in Modern Languages and Literatures : General	ROGE2M	5		
Advanced Master in French as Foreign Language	FLE2MC	5		