Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please visit the exchange programmes webpages.

Introduction to Python for Humanities and Social Sciences

Course Code	L_AABAALG075
Credits	6
Period	P1
Course Level	200
Language Of Tuition	English
Faculty	Faculty of Humanities
Course Coordinator	dr. L.G. de Passos Morgado da Costa BA
Examiner	dr. L.G. de Passos Morgado da Costa BA
Teaching Staff	dr. P.J.M. Sommerauer, dr. L.G. de Passos Morgado da Costa BA
Teaching method(s)	Seminar

Course Objective

This course is meant to introduce you to the basics of the Python programming language. There is a lot to discover about Python and programming in general, and you will probably learn something new every day if you continue programming after this course. In the master-level version of the course, our goal for you is to become an independent programmer who is able to find solutions to new problems.

Knowledge and comprehension: in the first half of the course, you will:

- Become familiar with the basics of python syntax and the basic data types in python
- Learn how to use basic python tools to work with and manipulate the basic data types in the Python Standard Library

Application: In the second half of the course, you will:

- Learn how to apply your knowledge to deal with different file types (e.g., plain text, CSV/TSV, JSON)
- Learn how to use external libraries for text analysis
- Learn how to explain your code and results to others by documenting it so it can be shared

Analysis: Throughout the entire course, you will develop the following skills:

- Learn how to analyze (and debug) your own code and other people's code
- Learn how to divide a problem into small and manageable sub-problems
- Learn how to structure your code around small, self-contained, and understandable modules

Synthesis: At the end of the course, you will:

- Be able to follow a suggested structure to work on small programming projects
- Be ready to learn how to work with new libraries we have not covered in the course
- Be able to continue to develop as a programmer in an independent and self-guided manner

We will focus on readability and understandability so that you will be able to share your code and results with others, and re-use your code in the future. This is a practical course, in which you will get a lot of hands-on experience. Due to the nature of this course, active participation is required.

Course Content

During this course, you will learn how to analyze text data using the Python programming language. No programming knowledge is required; we believe that anyone can learn how to program. You will learn how to extract information from text corpora; deal with different file types (plain text, CSV, JSON). We will focus on readability and understandability of your code so that you will be able to share it with others, and reuse your code in the future.

Additional Information Teaching Methods

The course is organized in blocks. Blocks typically follow this routine: - Lecture 1: introduction of concepts in the

form of an (interactive) lecture. Students are expected to have worked through preparatory exercises and ask questions in class. - Lecture 2: The lecturer focuses on dedicating time to more difficult concepts from the block. If there is enough time, students can already start working on the assignment. Students will have the opportunity to ask for help and clarification. The deadline for an assignment is typically soon after this lecture. - Lecture 3: this lecture is a feedback session. The lecturer provides general feedback about the submitted assignments.

Method of Assessment

Assessment has three components:

1) Mid-term Exam (20%): This exam tests basic concepts concepts in blocks 1 and 2. These concepts are the foundation of blocks 3 and 4. The exam will take place in class, at the end of block 2. To pass this course, you need a passing grade (at least 5.5).

2) Two graded individual assignments (40%): The assignments are designed to practice your programming and problem-solving skills. Moreover, they allow us to keep track of your progress, and identify topics that require more attention in class. To pass this course, each assignments needs a passing grade (at least 5.5).

3) Final exam (40%): The final exam is designed to test your knowledge of Python. To pass this course, you need a passing grade (at least 5.5).

Literature

To be announced on Canvas. All materials are freely available online (https://github.com/cltl/python-for-text-analysis/tree/master).

Additional Information Target Audience

All bachelor students who want to get acquainted with programming in Python.

Additional Information

Students need a working computer (or laptop) with access to the command line to complete this course. Any working laptop is sufficient. Note that tablets, phones and netbooks are usually not sufficient.

Recommended background knowledge

There are no prerequisites to take this course but an interest in text analysis is recommended.