GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2024-2025

Digital Humanities (A703307)

Course size *(nominal values; actual values may depend on programme)*

Credits 3.0 **Study time 90 h**

Course offerings in academic year 2025-2026

Lecturers in academic year 2025-2026

Offered in the following programmes in 2025-2026	**crdts**	**offering**

Teaching languages

Dutch

Keywords

Language technology, Digital Humanities

Position of the course

The goals of the course “Digital Humanities” (K4DH) are the following:
- Introduce students to the broad domain of digital humanities
- Introduce students to the programming language Python
- Introduce students to machine learning (systems)
- Familiarise students with building a language technology application (i.e. lexicon-based and machine learning system for sentiment analysis)

Contents

The content of the course “Digital Humanities” (K4DH) is thematically ordered and consists of the following modules:
- a theoretical introduction to allow the student to gain insight into language technology systems (such as sentiment detection, machine translation, retrieval systems, etc.) and their application in the domain of human sciences.
- a theoretical introduction to machine learning systems and hands-on exercises with the toolkit Weka.
- an introduction to Python in order to learn how to program basic scripts that allow to extract specific information from corpora. This knowledge is then applied to build a lexicon-based system for sentiment analysis.

Initial competences

- the general competences of an academic bachelor
- general knowledge about language and translation technology

Final competences

1 Having advanced knowledge of the language technology process and, based on that knowledge, critically assessing language technology tools [MV.1.4 assessed]
2 Critically applying theoretical models and methods of analysis to complex problems. [MV.2.3 assessed]
3 Communicating on their own research with both a broad and specialised audience, both orally and in writing. [MV.2.3 assessed]
4 Underpinning their views in a scientifically justified manner and sharing these with both lay people and colleagues in a coherent and clear manner. [MV.3.2 assessed]
5 Judging and acting with the necessary dose of critical self-reflection in unpredictable, complex and specialist contexts. [MV.3.3 assessed]

6 Identifying deontological and ethical aspects and acting accordingly. [MV.5.1 assessed]

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Seminar, Lecture, Independent work

Extra information on the teaching methods

During the lectures, the theoretical background is discussed which serves as the basis for the practical PC room exercises.
In the practical PC room exercises, the students learn to program in Python, experiment with machine learning techniques, etc. The students also get extra exercises to further practice their programming and experimental skills at home.

Study material

Type: Slides

Name: slides
Indicative price: Free or paid by faculty
Optional: no
Available on Ufora : Yes

Type: Software

Name: Python
Indicative price: Free or paid by faculty
Optional: no
Online Available : Yes

Type: Software

Name: Weka
Indicative price: Free or paid by faculty
Optional: no
Available on Athena : Yes

References

Steven Bird, Ewan Klein & Edward Loper. 2009. “Natural Language Processing with Python – Analyzing Text with the Natural Language Toolkit”, O’Reilly Media.
Rosenthal, Sara, Ritter, Alan, Nakov, Preslav & Stoyanov, Veselin. 2014. "SemEval-2014 Task 9: Sentiment Analysis in Twitter", Proceedings of the 8th International Workshop on Semantic Evaluation (SemEval 2014), 73-80, Dublin, Ireland, ACL.

Course content-related study coaching

The members of staff have a weekly consultation hour.

Assessment moments

continuous assessment

Examination methods in case of periodic assessment during the first examination period

Examination methods in case of periodic assessment during the second examination period

Examination methods in case of permanent assessment

Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

Assignment (100%)
At the end of the course, the students get an assignment on one of the themes covered in the lessons and write a paper on the topic.

Calculation of the examination mark

See heading 'Extra information on the examination methods'

Facilities for Working Students

Can be requested from the course responsible.

Addendum

K4TT