GHENT UNIVERSITY

Course Specifications

Valid as from the academic year 2026-2027

Introduction to Digital Text Analysis (A704153)

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

Credits 3.0 **Study time 90 h**

Course offerings and teaching methods in academic year 2026-2027

A (semester 1)	Dutch	Gent	independent work lecture
B (semester 1)	Dutch	Gent	

Lecturers in academic year 2026-2027

Lefever, Els	LW22	lecturer-in-charge
Hoste, Veronique	LW22	co-lecturer

Offered in the following programmes in 2026-2027	crdts	offering
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, French)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, German)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Italian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Language Technology)	5	B
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Russian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Spanish)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, English, Turkish)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, German)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Italian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Language Technology)	5	B
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Russian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Spanish)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, French, Turkish)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Italian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Language Technology)	5	B
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Russian)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Spanish)	3	A
Bachelor of Arts in Applied Language Studies: a combination of at least two languages(main subject Dutch, German, Turkish)	3	A
Master of Science in Teaching in Arts and Humanities (main subject History)	3	B
Master of Arts in History	3	B
Micro-credential Introduction to Language Technology	3	B
Linking Course Master of Arts in Multilingual Communication: a combination of at least	3	A

two languages		A
Linking Course Master of Arts in Translation: a combination of at least two languages	3	A
Preparatory Course Master of Arts in Interpreting: a combination of at least two languages	3	A
Preparatory Course Master of Arts in Multilingual Communication: a combination of at least two languages	5	A, B
Preparatory Course Master of Arts in Translation: a combination of at least two languages	5	A, B
Elective Set Linguistics	3	A

Teaching languages

Dutch

Keywords

digital text analysis, digital humanities, digital literacy

Position of the course

The aim of this coarse is to:

- make students aware of the importance of digital literacy as a core competence for understanding, using, and critically evaluating digital and AI-driven technologies, and for creating, enriching, processing, and analysing digital resources with the computer.
- provide students with a general overview of digital techniques, AI methods, and research practices within the humanities, with a particular focus on digital text analysis (e.g. computational linguistics, sociolinguistics, natural language processing, corpus linguistics, and network analysis).
- encourage students to reflect critically on the specific challenges of data-driven and AI-supported research, with particular attention to bias introduced through the selection of text corpora for research, model training, and tool development.
- introduce students to concrete research projects and techniques within the digital humanities, again with a focus on digital text analysis (e.g. case studies in language and translation technology, history, literary studies, ...).

Contents

This course provides an overview of the most important digital techniques within the different research fields of the humanities, with a focus on digital text analysis. The first part introduces the broader field of the digital humanities, in which digital text analysis and artificial intelligence play a central role. It offers a theoretical overview of the main digital techniques, AI methods, and computational approaches to automatic text analysis, starting with the collection, digitization and enrichment of resources, and the automatic search in large corpora or text collections. The introduction is followed by an overview of methods for natural language understanding, ranging from the more shallow lexical level to more complex semantic levels. We also elaborate on the problems inherent to processing natural language, such as ambiguity and world knowledge.
In addition to this theoretical foundation, much attention is also paid to critical reflection on the selection and use of resources for data-based research, the building and application of technology, the impact of machine learning systems and AI applications on society and the importance of a good understanding of the underlying algorithms for correctly applying and interpreting the output of these tools.
In the second part of the course, various use cases are discussed from the broader research domain of the digital humanities, again with a focus on digital text analysis. This way, an overview of state-of-the-art research and current trends is provided for some specific research domains (E.g., automatic text analysis for classical languages, the use of computational methods for the exploration and analysis of large text collections or contemporary digital media) and one or more representative research projects are presented.
During the guided self-study, students read scientific articles to prepare specific course components, complete modules of a digital learning path and make exercises.

Initial competences

Average general knowledge that can be expected from someone who has completed secondary education.

Final competences

1 Having a basic knowledge and insight into the different digital techniques and research methods within the humanities, and more in particular methods for digital text analysis. [B.1.7.; assessed], [LWDC.6.1.; assessed]
2 Developing thinking and reasoning skills and the capacity for critical reflection on building and applying tools for digital text analysis [B.3.3.; assessed], [B.5.1.; assessed]
3 Research skills: scientific literature. [B.2.3.; assessed]
4 Reflect on the scientific and societal role of Digital Humanities research within the socio-cultural context in which it is conducted. [B.5.1.; assessed], [LWDC. 6.2.; assessed]

Conditions for credit contract

Access to this course unit via a credit contract is unrestricted: the student takes into consideration the conditions mentioned in 'Starting Competences'

Conditions for exam contract

Access to this course unit via an exam contract is unrestricted

Teaching methods

Lecture, Independent work

Extra information on the teaching methods

Theoretical part: lectures, discussion of scientific research.
Recordings are made for all lectures, and all recordings are made available to all students.
Pratical part: guided self-study by means of a digital learning path

Study material

Type: Handbook

Name: Taaltechnologie ontrafeld
Indicative price: € 27
Optional: no
Language : Dutch
Author : Véronique Hoste, Cynthia Van Hee

Type: Slides

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

References

Rens Bod, De Vergeten wetenschappen, Prometheus, 2010.
Daniel Jurafsky & James Martin, "Speech and Language Processing. An Introduction to Natural Language Processing, Computational Linguistics, and Speech Recognition", 2008. Updated Version December 2020.

Course content-related study coaching

Discussion forum

Assessment moments

end-of-term and continuous assessment

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

Written assessment

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

Written assessment

Examination methods in case of permanent assessment

Participation

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible

Extra information on the examination methods

Trajectory with two foreign languages:

- Permanent evaluation: The students are assessed on the completion of digital learning paths and small assignments
- Periodic evaluation: written exam

Trajectory with language technology: same as trajectory with two foreign languages. Students following this trajectory will have to hand in an additional assignment (for 2 course credits).

Calculation of the examination mark

- Permanent evaluation: 5%
- Periodic evaluation: 95%

Facilities for Working Students

Possible exemption from educational activities requiring student attendance.
The examination cannot be rescheduled.
Possibility of feedback by e-mail or during consultation hour, restricted to answering specific questions.