GHENT UNIVERSITY

# Course Specifications

Valid as from the academic year 2024-2025

## Data Visualization of History (A004002)

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

**Credits 5.0** **Study time 150 h**

**Course offerings and teaching methods in academic year 2024-2025**

| | | | |
|---|---|---|---|
| A (semester 2) | Dutch | Gent | lecture |
| | | | independent work |
| | | | seminar |

**Lecturers in academic year 2024-2025**

| | | |
|---|---|---|
| Blomme, Hans | LW03 | staff member |
| Danniau, Fien | LW03 | staff member |
| Ducatteeuw, Vincent | LW03 | staff member |
| Birkholz, Julie | LW03 | lecturer-in-charge |
| Verbruggen, Christophe | LW03 | co-lecturer |

| **Offered in the following programmes in 2024-2025** | **crdts** | **offering** |
|---|---|---|
| Bachelor of Arts in Art History, Musicology and Theatre Studies | 5 | A |
| Bachelor of Arts in History | 5 | A |
| Postgraduate Certificate Heritage and Society | 5 | A |
| Linking Course Master of Arts in History | 5 | A |
| Preparatory Course Master of Arts in History | 5 | A |

**Teaching languages**

Dutch

**Keywords**

Digital humanities, digital history, digital heritage, metadata, linked open data, historical cartography, data visualisation, data management

**Position of the course**

The student is made familiar with the different steps in the digital data cycle and the possibilities and challenges of the digital transformation of sources for both the cultural heritage manager and the researcher.
The student knows the basic concepts of digital collections and can collect and make digital collections accessible for a specific target group.
The student can approach digital heritage collections as (research) data in response to a specific question.
The student knows and uses the principles of good data visualization.
The student is introduced to and uses tools for collecting, cleaning, enriching and visualizing data.
The student delves into the visualization of spatial data in combination with a longitudinal, historical perspective.
The student can reflect critically on digitization projects and digital humanities.
In this course there is collaboration with the Boekentoren and KBR - the Royal Library of Belgium and site visits are possible. Guest speakers will explain specific aspects of the digital transformation processes.

**Contents**

After a general introduction to the digital humanities and the digital data cycle, the course discusses the successive steps in the data cycle. Each lesson contains theoretical concepts, practices and software/tools. Students learn to work with the concrete tools and software packages.

Digitizing and unlocking sources: metadata, linked open data and data management (Omeka S)
Heritage collections as data: data collection and data cleaning (e.g. OpenRefine)
Collections for researchers: digital text analysis (e.g. named entity recognition, sentiment analysis, word frequencies-word clouds)
Collections for the public: visualization and presentation (e.g. Madoc)
In-depth: GIS Software (e.g. QGIS, ArcGIS)
Reflection on the digital transformation and the range of online tools
Each module includes a limited sub-assignment. The partial assignments may differ for students of the history program and students of the postgraduate program in heritage and society.

**Initial competences**

**Final competences**

1 Have insight into the methodology of history.
2 Have the ability to critically apply quantitative and qualitative methods and techniques.
3 Be conscious of the importance of scientific integrity.
4 Have insight into how related human and social sciences function.
5 Be able to apply the principles of digital source criticism to the own research objects in an independent and scientific manner.
6 Be able to compare, select, use responsibly and critically evaluate digital formats to create own digital versions of analogue or digital research objects.
7 Be able to compare, select, use responsibly and critically evaluate digital methods to collect and manage analogue or digital research objects in a structured manner.--- Klik om te editeren ---
8 Be able to designing a data model that structures (relationships between) properties of research objects and operationalising this model in the form of a database.
9 Be able to compare, select, use responsibly and critically evaluate digital tools to improve the quality of digital research objects or datasets.
10 Be able to digitally enrich research objects with information such as annotations or metadata.
11 Recognise repetitive tasks that can be automated and find and use digital applications to perform that task.
12 Be able to compare, select, use responsibly and critically evaluate digital analysis methods to perform analyses (content, network, relational, spatial, structural or stylistic).
13 Be able to compare, select, use responsibly and critically evaluate digital visualisation methods in order to carry out analyses or present research results.
14 Use digital methods for project collaboration in one or more phases of a research process.
15 Be familiar with the basic concepts and the inter- and transdisciplinary possibilities of Digital Humanities.
16 Being able to recognize and contextualize current developments in dealing with heritage at a local, regional, national and international level.
17 Being able to recognize and contextualize current developments in dealing with heritage at a local, regional, national and international level.
18 Have thorough knowledge and insight into the wide range of groups and communities in the hyperdiverse society and stimulate and facilitate their participatory approach to heritage.
19 Have updated and innovative insights into cultural literacy, public participation and multi-voiced, inclusive communication about heritage in society.
20 Have a thorough insight into the possibilities and challenges of digitization and digital access to tangible and intangible heritage, as well as the archiving and access to digital heritage.
21 Devising, formulating, developing and implementing appropriate strategies for innovative digitalization processes.

**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**

Seminar, Lecture, Independent work

**Extra information on the teaching methods**

Introductory lectures and practical exercises

**Study material**

Type: Handouts

Name: Articles
Indicative price: Free or paid by faculty
Optional: no
Language : English
Available on Ufora : Yes
Online Available : Yes
Available in the Library : Yes
Available through Student Association : No

**References**

Wilke, C. O. (2019). Fundamentals of data visualization: a primer on making informative and compelling figures. O'Reilly Media.
Verborgh, R., & De Wilde, M. (2013). Using OpenRefine : the essential OpenRefine guide that takes you from data analysis and error fixing to linking your dataset to the Web. 1 New ed. Birmingham: Packt Publishing Limited.
D'haeninck, T., Nico, R., & Verbruggen, C. (2015). Visualizing longitudinal data: rooted cosmopolitans in the low countries, 1850-1914. In First Conference on Biographical Data in a Digital World 2015 (Vol. 1399, pp. 116-121). CEUR WS.
Romein, C. Annemieke, Max Kemman, Julie M. Birkholz, James Baker, Michel De Gruijter, Albert MeroñoPeñuela, Thorsten Ries, Ruben Ros, and Stefania Scagliola. "State of the field: digital history." History 105, no. 365 (2020): 291-312.

**Course content-related study coaching**

Availability of professors and/or co-lecturer for supervision of specific student assignments.

**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**

Participation, Presentation, Assignment

**Possibilities of retake in case of permanent assessment**

examination during the second examination period is possible

**Calculation of the examination mark**

100% non-periodic evaluation.
In order to pass, students must have completed all partial assignments and at least passed the GIS module.

**Facilities for Working Students**

1. Possible exemption from educational activities requiring student attendance, a task is imposed in substitution.
2. The examination cannot be rescheduled.
3. Feedback can be given by email, or during an appointment during office hours.
For more information concerning flexible learning: contact the monitoring service of the faculty of Arts and philosophy