Course Specifications
Valid as from the academic year 2018-2019

Course
Digital Methods (K001194)

Valid as from the academic year 2018-2019

Lecturers in academic year 2018-2019
De Grove, Frederik
PS01 lecturer-in-charge

Course offerings in academic year 2018-2019
A (semester 2) English

Offered in the following programmes in 2018-2019
Bachelor of Science in Communication Science

4 crdts offering A

Teaching languages
English

Keywords
Methodology, digital methods, social network analysis, internet research, quantitative research methods, qualitative, research methods, big data.

Position of the course
The datafication that characterizes our contemporary information society has led to an exponential growth in digital data. This provides challenges and opportunities for studying media and communication. In this course, we consider digital methods as those methodologies and methods that allow us to gain an understanding of the social world -both online and offline- by making use of data created by our interactions with digital technologies. The central aim of this course is to teach:
1 a theoretical, conceptual and critical understanding of digital data and the knowledge they can generate,
2 how and when to apply methods and techniques related to digital data in a social scientific context,
3 a select number of tools and skills to collect, analyze and visualize digital data.

Contents
Introduction
• Introduction to digital methods and the social sciences.
• Digital methods: an addition to the methodological toolbox.
• The critical and the digital.
• Ethical considerations when doing digital methods.
Data collection and management
• Data types and sources.
• Databases.
• Methods of data collection:
  • Scraping, APIs.
  • The digital toolbox.
Data analysis
• Computational methods and data mining.
• Social network analysis.
• Automatic text analysis.
• Digital ethnography.
• Data visualisation.

Initial competences
This course builds on the knowledge derived from the following courses:
- Statistics (Ba1)
- Methodology of social sciences (Ba1)
- Quantitative techniques (Ba2)
- Qualitative techniques (Ba2)

Final competences
1. To have knowledge of the most important developments in the field of digital methods and internet research.
2. To gain insight into digital methods and techniques and to be able to apply them in communication scientific research.
3. To reflect critically about ethical and political aspects concerning the usage and the implications of digital methods.

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
Lecture, on-line discussion group, lecture: plenary exercises

Extra information on the teaching methods
This course combines several work forms:
- Lectures: provide a framework for integration of and insights into different aspects concerning digital methods.
- Lectures: plenary exercise: Students get to know several methods and techniques of data collecting, analyzing and visualizing and they participate in this during the lectures.
- Online discussion group: Students learn from each other by posting messages and comments on Minerva, with active participation of the instructor.

Learning materials and price
Reader with scientific articles and book chapters and PowerPoint-slides. All material will be offered online through the digital learning platform Minerva.

References
Note that as a student, you do not need to buy these books. They only serve as a starting point for the interested reader.

Course content-related study coaching
Interactive coaching via Minerva (forum, information on the curriculum and the examination, additional documents, ...)

Evaluation methods
End-of-term evaluation

Examination methods in case of periodic evaluation during the first examination period
Written examination

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

Examination methods in case of permanent evaluation

Possibilities of retake in case of permanent evaluation
Examination during the second examination period is possible in modified form

Extra information on the examination methods
The written exam will consist of closed and open-ended questions.

Calculation of the examination mark
Periodic (100%)

Facilities for Working Students
After appointment with the lecturer.

(Approved)