

Digital Methods SOSGEO2920

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Course Description

An ever larger part of our time and our social and professional lives takes place on the internet. This goes for our love lives, for our interaction with friends and acquaintances, for our participation in democratic and public debate - or in almost any other debate; it goes for our relation to the politicians we elect, our use of news media and our search for knowledge and information; just as it goes for our interests in fashion or cultural trends or virtually any other cultivation of interests, hobbies or political opinions with like minded others.

Due to this increasingly digital context of social life, and to the extent it is not privatized, these communicative exchanges and interaction patterns are retrievable and open to analysis with digital means. This opens up new social scientific and empirical possibilities, which a new field of digital methods seeks to exploit and appreciate. This new field of digital methods with its own strengths and problems has begun to take shape between the more traditional quantitative and qualitative conceptions of method.

This course provides a basic introduction to the field of digital research methods for undergraduate students. *It requires no coding or programming skills or prior experience with digital research tools.* It centers on hands-on exercises and mini-projects to explore the potential utility and versatility of a broad range of tools (e.g., for issue crawling and 'mapping', data scraping, text mining and visualizing data). The course teaches students to extract or 'scrape' text and interaction data from the Internet, including important social media platforms, and to visualise and analyse these data in novel ways and with novel means. The course will considerably augment the student's range of means to access and analyse empirical material more generally: it is meant to generate competences which can be of use to complement and nuance virtually any social scientific investigation, eventually (or not) in tandem with traditional methods. The course also touches upon more theoretical aspects and discussions associated with digital social science, esp. digital sociology, and the use of digital methods, including theories about how (social) media frames and informs interaction, about the relationship between the digital and the social, and about the ethical implications and problems of digital research. Yet, it focuses on the development of technical skills and upon gaining familiarity with the software tools introduced during the course.

Enrolled students should prepare for unavoidable frustrations with the software tools used in the course. The fast changing reality of the Internet and the changing strategies of major web service providers such as Google and social media platforms like Facebook towards external researchers creates a number of difficulties.

All students need to commit to working in groups of 4 or 5 during the semester. If you are not prepared to engage in group work, this course is not for you. These groups will be formed by the instructors at the beginning of the course, and barring exceptional circumstances, they will remain stable throughout the course. Importantly, students will take their final exam in these groups (see below).

Learning Objectives

At the end of the course, students will

- Have experience with (freely accessible) software tools permitting extraction and analysis of interaction data and text from internet sites and important social media platforms
- Have knowledge about the distinct nature of digital research methods and how they differ from and may complement conventional methods (qualitative and quantitative)
- Be capable of reflecting on the ethical challenges associated with digital methods and develop responsible research strategies
- Have insight into the main theories as to how digital media and their designs perform social action and affect social experience online as well as more broadly
- Have gained acquaintance with the main themes of digital sociology and digital social science more generally

Number of lectures

The Course entails one four-hour (4 * 45min) lecture (the Introduction), 9 two-hour lectures and one whole day student exam workshop (without preparation, see lecture 9). This is equivalent to 12 standard double lectures.

Software Installations

All students will have to install the following software tools on their personal laptops. We will provide installation support during the first week of the course.

- Hyphe: - <https://github.com/medialab/hyphe> Help with Hyphe: <https://www.gitmemory.com/issue/medialab/hyphe/408/834659305?fbclid=IwAR1kIKhdhotDA9Lfvw4ToAh2YITYiajPmFHq1rdJgG3JylcZKQ8y0J3DMpY>
- Gephi: <https://gephi.org/users/install/>
- Facepager (Install the 4.3.10 version): <https://github.com/strohne/Facepager>
- Excel or other spreadsheet program

Exam (plus obligatory workshop)

Group Exam: The final exam will be a group project. To the extent possible, students will complete the exam in the same groups they have worked in throughout the course. Group adjustments might be required, e.g., due to withdrawals or illness. Final exam group compositions will be posted on Canvas one week before the exam.

Project Description: Each group will collectively develop their exam project (description) during the 'tool and project workshop day' at the end of the semester (lecture 9). *Note that participation (physical presence) in the project workshop is mandatory.* Each group will write a synopsis of their project (max 200 words) during the workshop. The synopsis of the group exam project must be approved by the instructors. The proposed project must meet the following criteria:

- Apply at least one of the tools introduced in one of the lectures for data extraction from at least one Internet platform (e.g., Wikipedia, Twitter, Facebook) and/or traditional websites,
- Include the use of network visualisation software (e.g., Gephi),
- Use at least one of the text mining devices introduced during the course (e.g., Voyant Tools).
- Discuss at least one theoretical and one ethical issue related to the project.

Students will complete their previously approved project and *collaboratively draft a group paper* (maximum 4000 words in a five-person group; the final word limit will depend on group size) during the one-week exam period. In addition, each group will fill out a group work form

(available on Inspira), answering questions about their collaborative process. The form has to be attached to the collaborative paper; both documents have to be submitted as a single pdf file. Each exam should have a cover page that lists the exam ID of all group members.

Logistics: Students will have seven days to complete the group project. While each group writes a collective paper, each individual student has to submit their group's paper in Inspira by the exam deadline. In other words, multiple students will submit the same exam document. The document must contain three components: (1) cover sheet with all group member exam IDs, (2) collaborative paper, (3) group work form.

Grading: UiO letter grading policies (A-F) apply. All members of a group will receive the same grade. Please note that individual appeals and complaints can result in a different grade for the appealing/complaining student - but that this change of grade (given to the appealing student) will not affect the grade of the other group members.