



DEPARTMENT OF APPLIED INFORMATION TECHNOLOGY

TIA125 Data and Society, 7.5 credits

Data och Samhälle, 7,5 högskolepoäng

Second Cycle

Confirmation

This course syllabus was confirmed by Department of Applied Information Technology on 2022-02-11 to be valid from 2022-08-29, autumn semester of 2022.

Field of education: Social Sciences 50% and Technology 50%

Department: Department of Applied Information Technology

Position in the educational system

The course is given as a freestanding course.

Main field of studies

-

Specialization

A1N, Second cycle, has only first-cycle course/s as entry requirements

Entry requirements

To be eligible for the course the student must have a Bachelor's degree (180 credits).

Applicants must prove their knowledge of English: English 6/English B from Swedish Upper Secondary School or the equivalent level of an internationally recognized test, for example TOEFL, IELTS, or alternatively a bachelor's degree from an education held in English.

Learning outcomes

On successful completion of the course the student will be able to:

Knowledge and understanding

- critically reflect on key concepts and perspectives related to the constructed nature of data and the role of digital data platforms, such as social media and data

infrastructures;

- describe how circulation and use of data are shaped by social and material factors, including social institutions and technologies;
- describe the social and cultural consequences of how data is constructed, particularly with regard to gender, class, and ethnicity;

Competence and skills

- select and use relevant digital tools to engage in the analysis and interpretation of a dataset leading to proposed hypotheses of root causes that can inform improvement actions;
- present results orally and visually in a professional manner;
- discuss the potential and constraints of using data critically and constructively;

Judgement and approach

- apply data inquiry using digital techniques for collecting, cleaning, analyzing, and visualizing data;
- consider the potential and constraints of using data for public debate and social intervention;
- critically evaluate possible data biases for the development of Artificial Intelligence.

The course is sustainability-related, which means that at least one of the learning outcomes clearly shows that the course content meets at least one of the University of Gothenburg's confirmed sustainability criteria.

Course content

The course is intended to connect the construction of data as a highly technological practice to broad social questions of structural inequalities, evidence, and knowledge. It examines how datafication produced by digital technologies creates and structures society, and maintains certain asymmetries and power relations. Using concepts from Science and Technology Studies and Critical Data Studies, the course aims to provide tools to understand the constructed nature of data and engage the students in inquiring data, through their collection, analysis, visualization, and interpretation.

The course is organized into three modules, each with a series of lectures and hands-on sessions. These are followed by the opportunity to conduct small group work. The course provides training in planning and carrying out a small data study, identifying and using methods to build a data corpus, apply exploratory analysis techniques, visualize, interpret, and present the results.

Course Modules

- 1) Theoretical: this module will teach theoretical concepts from Science and Technology Studies to reflect critically on the constructed nature of data and the sociotechnical context in which data is generated. It will also examine how the increasing quantification of human life promoted by digital technologies shapes society.
- 2) Methodological: this module will present tools for collecting, cleaning, analyzing, and visualizing data.
- 3) Practical: this module will involve group work that can focus on small case studies in subjects relevant to the students. During the group work, the students will collect - or will be provided with - data, develop an analytical corpus, and interpret the data and develop a story, in which they turn the results into recommendations for improvement actions. The results of group work will be presented in the form of an oral presentation and individual reports.

Form of teaching

Instruction in the course will be given by several co-lecturers. It will consist primarily of lectures and hands-on sessions, both in class and online. At the end of the group work, the students will present what has been done by writing individual reports which should include reflections on their own course and learning experience. The results of the group work will be presented through oral presentations at the end of the course.

Language of instruction: English

Assessment

Assessment and grading in the course are based on three compulsory parts:

- a) quiz for summative assessment of key concepts, 2,5 credits. Grading scale: Pass with Distinction (VG), Pass (G) and Fail (U).
- b) individual reports, 2,5 credits. Grading scale: Pass with Distinction (VG), Pass (G) and Fail (U).
- c) the content and conduction of the oral presentation of group work, 2,5 credits. Grading scale: Pass (G) and Fail (U). If a student is prevented to take part in the group work for a legitimate reason of absence, the examiner may decide to provide an alternative form of examination.

A student who has taken two exams in a course or part of a course without obtaining a pass grade is entitled to the nomination of another examiner. The student needs to contact the department for a new examiner, preferably in writing, and this should be approved by the department unless there are special reasons to the contrary (Chapter 6 Section 22 of the Higher Education Ordinance).

If a student has received a recommendation from the University of Gothenburg for special educational support, where it is compatible with the learning outcomes of the course and provided that no unreasonable resources are required, the examiner may decide to allow the student to sit an adjusted exam or alternative form of assessment.

In the event that a course has ceased or undergone major changes, students are to be guaranteed at least three examination sessions (including the ordinary examination session) over a period of at least one year, but no more than two years, after the course has ceased/been changed. The same applies to placements and professional placements (VFU), although this is restricted to just one additional examination session.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U).

In order to get the grade Pass (G) for the full course, the student must receive the grade Pass on all three compulsory parts. In order to get the grade Pass with Distinction (VG) for the full course, the student must receive the grade pass on all the compulsory parts and get the grade Pass with Distinction on the quiz for summative assessment of key concepts, and the individual report.

Detailed guidelines and assessment criteria for quizzes, individual reports and the oral presentation of group work will be made available for students in a course guide.

Course evaluation

An anonymous course evaluation will be conducted at the end of the course. The results of and possible changes to the course will be shared with students who participated in the evaluation and students who are starting the course.

Additional information

The course meets the following sustainability criterion confirmed by the University of Gothenburg:

5. Human rights and social equity

Distribution, discrimination, health and poverty issues and the mutual interaction between social inequality, poor health, the natural environment and people's opportunities for good living conditions.