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 and was last revised on 2023-05-29 to be valid from 2023-06-01, autumn semester of 2023.

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 and as an elective course in the programme specified below.

The course can be part of the following programme: 1) Human-centered Artificial Intelligence Master's Programme (T2HAI)

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 intends to connect data construction 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 specific 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 about data through their collection, analysis, visualization, and interpretation.

The course is organized into three modules, each with lectures and student-led seminars. These are accompanied by the opportunity to conduct small group work. The course provides training in planning and carrying out a small data study in groups, identifying and using methods to build a data corpus, applying exploratory analysis techniques, and

visualizing, interpreting, and presenting 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 focusing 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, interpret the data and develop a story, in which they turn the results into recommendations for improvement actions. The results and group work experience will be presented as an oral presentation and individual reports.

Form of teaching

Several co-lecturers will teach the course. The course will be offered in person unless circumstances require otherwise. Student attendance is expected.

The course will consist primarily of lectures, student-led seminars, and group work. Active participation in group work preparation and oral presentation is compulsory. Active participation in student-led seminars to discuss readings is also compulsory. At the end of the course, students will also write short individual reflective essays, which should include reflections on the group work and their learning experience in the course.

Language of instruction: English

Assessment

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

a) active participation in four compulsory student-led seminars, 3 credits. Grading scale: Pass (G) and Fail (U). In case of absence from a maximum of two seminars, there is the opportunity to do a compensatory assignment determined in consultation with the course coordinator. In case of absence from three or more student-led seminars, a student must participate in a compensatory seminar, in addition to the compensatory assignments.

b) individual reflective essay, 1,5 credits. Grading scale: Pass with Distinction (VG), Pass (G) and Fail (U).

c) the content of group work and conduction of the oral presentation of group work,

3 credits. Grading scale: Pass (G) and Fail (U). If a student is prevented from taking part in the group work for a legitimate reason of absence (e.g., medical condition, caretaking responsibilities), the examiner may decide to provide an alternative form of examination. If a student fails the alternative examination form, s/he can redo it at the next course occasion.

A student who has taken two exams in a course or part of a course without obtaining a passing grade is entitled to the nomination of another examiner. The student must contact the department for a new examiner, preferably in writing. 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).
The assessment consists of multiple assignments. Each assignment contributes to the course grade. Detailed assessment criteria for each assignment will be available to students in Canvas. To get the grade Pass (G) for the entire course, the student must receive the grade Pass on all three assignments. To get the grade Pass with Distinction (VG) for the entire course, the student must receive the grade Pass on the group work and participation in student-led seminars and get the grade Pass with Distinction in the individual reflective essay.

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.