



## Course and Examination Fact Sheet: Spring Semester 2025

### 8,728: Technologien/Technologies: Living in a Technological Culture

ECTS credits: 3

#### Overview examination/s

(binding regulations see below)

decentral - Written work, Digital, Individual work individual grade (70%)

Examination time: Term time

decentral - Presentation, Analog, Group work group grade (30%)

Examination time: Term time

#### Attached courses

Timetable -- Language -- Lecturer

[8,728,1.00 Technologien/Technologies: Living in a Technological Culture](#) -- English -- [Mesman Jessica](#)

#### Course information

##### Course prerequisites

None

##### Learning objectives

After completion of this course, you are able

- to explain different perspectives on the relationship between society, science and technology;
- to explain the differences between deterministic approaches and the Science and Technology Studies (STS) approach;
- to reflect critically on common sense views about knowledge production;
- to recognize, explain and apply the basic principles of STS-reasoning to our current societal concerns.

##### Course content

'We can't solve problems by using the same kind of thinking we used when we created them' - Albert Einstein

These words of Albert Einstein are more valid today than ever. The complexities of today's societies and the relationships between them are manifold and not easy to handle. Einstein's plea to look at them in a different way is exactly what this course is about. The course aims to change your perspective on the world, so that you find that 'the stuff of the world' can be thought about in new ways that offer opportunities for interventions and passageways for improvement. After all, making a difference requires more than decisiveness: it requires thinking in new ways, thinking 'out of the box'. And that is exactly what this course aims to do by introducing you to the field of Science and Technology Studies (STS).

This course emphasises the need to think about social, cultural, historical, political and economic conditions to understand the evolution of science and technology. The development of science is often seen as, essentially, an autonomous process - a process of gradual accumulation of knowledge driven by purely internal imperatives, such as the search for truth. In the same vein, technology is largely seen as a process of applied science that simply results from previous scientific advances. The field of Science and Technology Studies (STS) challenges this perspective on science and technology. This course will introduce you to the STS framework and lay the foundation for new insights. You will be introduced to a number of examples, such as AI, post-truth, Big Data, and the politics of artefacts, to show the many ways in which science and technology, individuals and institutions mutually shape each other to the benefit and sometimes detriment of society.



Note: In this course, we take a "critical" approach to science and technology and its relationship to society. By this we do not mean that we are negative about science or technology. But similar to the balanced views we expect from good film critics, we will focus on developing your ability to judge the good and bad aspects of science and technology.

## Course structure and indications of the learning and teaching design

This block course is based on lectures, seminars, and group work. The lectures provide essential background information on the topics discussed during the seminars. During the seminars (study sessions), we discuss the key questions formulated in the course book and related to the compulsory readings of the seminar.

Day 1: The course starts with discussing science and technology and its relationship to society. We will continue scrutinising visions of the future to expose their underlying assumptions and the power of expectations. In this meeting, Artificial Intelligence, the projects of Elon Musk and the predictions of Ray Kurzweil, will serve as case studies.

Day 2: This second day is dedicated to the interrelationship between knowledge production, technological innovation, and societal forces. In the morning, we will focus on Big Data and the role of algorithms in the process of knowledge production. Big Data is a game changer in terms of research. What are the implications for research and society? What becomes visible if we take a more critical stance? In the afternoon, we will elaborate on current concerns about knowledge production by discussing issues such as "the crisis of trust, post-truth and fake facts". For our discussions, we will use climate change as a case study.

Day 3: The morning session focuses on technology's political and moral dimensions. We will critically reflect on the idea that science and technology are the apolitical benefactors of mankind. Questions we will ask ourselves: what are the politics of artefacts? How can we deal with the unintended consequences of technology, like privacy issues? In the afternoon, we shift our focus to the role of the socio-cultural context in which artefacts and knowledge are produced and the role of metaphors in particular. Here, we return to the example of our digitalised world.

Day 4: The morning session of the fourth day will be spent by you preparing for the group exam: the analysis of an episode of *Black Mirror*. The result of this group effort will be presented in the afternoon.

Contextual Studies are considered part of **Contact Learning**; thus, taking part properly implies **regular attendance**. It is the students' own responsibility to ensure that there is **no timetable clash** between the courses they have chosen. A detailed course outline and all relevant documents will be made available on **StudyNet**. Only the current timetable as published on **Courses** does apply.

## Course literature

A list of texts will be made available via StudyNet. You will be asked to read several texts on StudyNet before the first meeting. This will speed up our start. The course coordinator will let you know what you need to read during the course. Please note that during the compact course, you will also be asked to read in the evening.

## Additional course information

Prof. dr. Jessica Mesman holds a Chair in 'Complexity and Epistemic Diversity' at Maastricht University in the Netherlands. Her field of expertise is Science and Technology Studies with a focus on medical practices.

## Examination information

### Examination sub part/s

#### 1. Examination sub part (1/2)

##### Examination modalities

Examination type	Written work
Responsible for organisation	decentral
Examination form	Written work



Examination mode	Digital
Time of examination	Term time
Examination execution	Asynchronous
Examination location	Off Campus
Grading type	Individual work individual grade
Weighting	70%
Duration	--

## Examination languages

Question language: English

Answer language: English

## Remark

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## Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

## Supplementary aids

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## 2. Examination sub part (2/2)

### Examination modalities

Examination type	Presentation
Responsible for organisation	decentral
Examination form	Oral examination
Examination mode	Analog
Time of examination	Term time
Examination execution	Asynchronous
Examination location	On Campus
Grading type	Group work group grade
Weighting	30%
Duration	--

### Examination languages

Question language: English

Answer language: English

### Remark

presentation scheduled on last day of the course

### Examination-aid rule

Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

### Supplementary aids

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## Examination content



## **A: Presentation of Black Mirror analysis** (presentation in groups, all the same grade; 30%)

Working in teams, you will present an in-depth analysis of one of the episodes of *Black Mirror*, a British anthology series that shows the dark side of life and technology. As a group, you should be able to explain your topic and link it to some STS theoretical concepts. The presentation will last 20 minutes. Each presentation will be followed by a 10-minute discussion. Before the general presentation session starts, submit your analytical argument by sending a one-pager to [jessica.mesman@unisg.ch](mailto:jessica.mesman@unisg.ch) + a PDF of your presentation slides. For more detailed information: see assignment page on StudyNet.

## **B: Written work** (individual paper; 70% of your grade)

You must submit a paper of at least 15,000 characters including spaces (excluding title page, bibliography and footnotes; line spacing 1.5). You are free to choose your own topic. This topic should be clearly related to the issues discussed in class and firmly intertwined with STS theoretical concepts covered in the literature, our seminars discussions, and/or lectures, and relevant for your argument. For more detailed information: see assignment page on StudyNet.

## Examination relevant literature

According to the chosen topic; see course literature.

### Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW21) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 13 (Monday, 25 March 2025) are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 04 (Thursday, 23 January 2025);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 17 March 2025);
- Examination information (supplementary aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 14 (Monday, 31 March 2025);
- Examination information (regulations on aids, examination contents, examination literature) for centrally organised examinations: two weeks before ending with de-registration period in CW 15 (Monday, 07 April 2025).