

## COURSE OUTLINE

### (1) GENERAL

SCHOOL	Social Sciences		
ACADEMIC UNIT	Sociology Department		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	ANAK282	SEMESTER	Spring
COURSE TITLE	Technology and Social Inequalities		
TEACHER	Dr. Hara Kouki		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>	WEEKLY TEACHING HOURS	CREDITS	
	3	5	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>			
PREREQUISITE COURSES:	None		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes, upon request and on the basis of preparing an essay and presenting it in the course (in English)		
COURSE WEBSITE (URL)			

### (2) LEARNING OUTCOMES

<p><b>Learning outcomes</b>  <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> <li>• <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i></li> <li>• <i>Descriptors for Levels 6, 7 &amp; 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i></li> <li>• <i>Guidelines for writing Learning Outcomes</i></li> </ul>
<p><b><u>Students are expected to:</u></b>  <b><i>Learning outcomes</i></b></p> <ul style="list-style-type: none"> <li>• To become familiar with, recognize, and critically analyze key concepts, theoretical frameworks, and ethnographic case studies from the discipline of Science, Technology, and Society Studies (STS).</li> <li>• To understand the methodological approaches through which the field of Science, Technology, and Society Studies (STS) is applied in social research, with a particular focus on the analysis of the (re)production of social inequalities.</li> <li>• To become familiar with the sociological analysis of technology and the historical formation of related concepts, institutions, and practices.</li> <li>• To be able to distinguish and develop central arguments in critical approaches concerning narratives of scientific progress and the authority of experts associated with technology.</li> <li>• To understand and analyze how power relations, politics, and collective identities shape scientific progress and technological artifacts.</li> <li>• To analyze how intersecting forms of inequality (gender, race, class, disability, Global North-South divide) influence the design and implementation of technologies.</li> </ul>

- To understand the role of technology in historical struggles and contemporary social justice movements.
- To become familiar with the interconnections between technology, the environment, climate change and sustainable development.

**Skills:**

- To develop critical thinking regarding dominant narratives on technology and its use
- To recognize the historical formation of technology
- To recognize the dual role of technology as both a means of social control and a tool for social justice.

**General Competences**

*Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?*

<i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i>	<i>Project planning and management</i>
<i>Adapting to new situations</i>	<i>Respect for difference and multiculturalism</i>
<i>Decision-making</i>	<i>Respect for the natural environment</i>
<i>Working independently</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i>
<i>Team work</i>	<i>Criticism and self-criticism</i>
<i>Working in an international environment</i>	<i>Production of free, creative and inductive thinking</i>
<i>Working in an interdisciplinary environment</i>	<i>.....</i>
<i>Production of new research ideas</i>	<i>Others...</i>
	<i>.....</i>

- Autonomous work - Group work
- Exercise planning and management
- Work in an interdisciplinary environment
- Respect for diversity and multiculturalism
- Promotion of free, creative and inductive thinking
- Exercise criticism and self-criticism and develop critical thinking, especially in relation to what seems self-evident
- Pursuit of social responsibility and empathy in matters of class, gender, race and disability

**(3) SYLLABUS**

**Summary**

This course explores the complex relationship between technology and social inequalities through the lens of Science, Technology, and Society Studies (STS). Beginning with theoretical texts, students will examine how science and technology are socially constructed, historically shaped, and politically biased. The course traces the historical development of technology, not only as a tool of power and control but also as a space where alternative, emancipatory futures can be envisioned and contested.

The course further focuses on the intersections of gender, race, class, and disability and global inequalities (Global North/ South), analyzing how technological systems contribute to both the (re)production and the overturning of social inequalities. The final section of the course adopts a decolonial perspective, focusing on the use of technology within settler colonial regimes, while also highlighting the role of technology in acts of resistance.

Through this theoretical framework, STS methodological approaches, and ethnographic case studies, students will familiarize themselves with a critical sociological approach to technology, aiming to imagine more just technological futures.

**Indicative Course Structure:**

**Introductory Session**

- Getting to know each other
- Introduction to the course’s problematics, themes, and methodology
- Presentation of topics for optional assignments

**Section A: Developing a Sociological Perspective on Technology**

- Introduction to Science, Technology, and Society Studies (STS)
- Historical trajectories of technology

Section B: Interdisciplinary Approaches and Case Studies

- Gender, Care, and Technology
- Race and Technology: Medical and Institutional Racism
- Class, Labor, and Technology
- Disability and Technology
- Decolonial Approaches to Technology: The Case of Settler Colonialism

Final Session

- Summary and discussion on technological futures
- Evaluation of the learning experience and reflection

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face-to-face	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	<ul style="list-style-type: none"> <li>• Projecting slides for the lectures</li> <li>• Use of technological tools (videos, polls, jamboard, etc.) for participatory exercises during the lectures</li> <li>• Support of the learning process through the electronic platform moodle (elearn)</li> </ul>	
TEACHING METHODS <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.  The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<i>Activity</i>	<i>Semester workload</i>
	Lectures	36
	Study and analysis of bibliography	26
	Independent optional study	23
	Critical Analysis of Audiovisual Material	20
	Interactive Teaching	10
	Course total	150
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure  Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other  Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	<p>The degree may depend in part on,</p> <ol style="list-style-type: none"> <li>1. the final exam (100%), or</li> <li>2. the final exam (70%), and one paper (30%)</li> </ol> <p>The written examination includes:</p> <ol style="list-style-type: none"> <li>1. Multiple choice questions</li> <li>2. Short responses</li> <li>3. Open ended questions</li> </ol> <p>Optional Assignment (30%) 1,500 words, 30% of the mark, provided that the final exam will be passable.</p> <p>The objective of the assignment is to summarize and develop a critical positioning in the study of issues discussed during the semester. Clarifications of the assignments, as well as the grading criteria, will be made known to students at the beginning of lectures and posted on the course website.</p>	

(5) ATTACHED BIBLIOGRAPHY

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Light, J. (1999). "When Computers Were Women." *Technology and Culture*, 40(3), 455–483

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(6) Connection to the Sustainable Development Goals

5, 8, 9, 10,



TAGS (choose 2 to 5)

TARGETS	Choose from the suggested words
	<p>Poverty Social protection Social cohesion Equal human rights Social resilience Social vulnerability</p> <p>Social shocks/disasters Environmental shocks/disasters Development cooperation</p> <p>Developing countries Least developed countries</p>
	<p>Hunger Access to food Nutrition Agricultural income Food production Food security</p> <p>Agricultural practices Ecosystems Climate change and adaptation Extreme weather Land quality</p> <p>Soil quality Species variety Rural infrastructures Gene banks (plant and/or livestock)</p> <p>Developing countries Least developed countries</p>
	<p>Mortality (maternal and/or newborns) Epidemics Mental health Use of alcohol and/or narcotic drugs</p> <p>Road traffic accidents Sexual/reproductive health</p> <p>Universal health coverage (including medicines and vaccines) Pollution (air/water/soil)</p> <p>Health services management (financing and/or workforce development)</p> <p>Health risks (early warning, risk reduction, management)</p>
	<p>Equitable access to education (primary, secondary, technical, vocational, university)</p> <p>Early childhood (development and pre-primary education)</p> <p>Skills (technical and/or vocational) Inclusive education Teachers' qualifications and training</p> <p>Lifelong learning</p>

**TARGETS**

Choose from the suggested words

<b>5</b> GENDER EQUALITY 	<b>Discriminations against</b> Exploitation of women Women's inclusion in decision-making <b>Gender</b> Empowerment of women and girls
<b>6</b> CLEAN WATER AND SANITATION 	Drinking water Sanitation and hygiene Water quality Water recycling/reuse Water resources management Water-related ecosystems
<b>7</b> AFFORDABLE AND CLEAN ENERGY 	Renewable energy Energy mix Energy efficiency Clean energy Energy technologies Fossil fuels Developing countries Least developed countries
<b>8</b> DECENT WORK AND ECONOMIC GROWTH 	Economic growth <b>Technology upgrading and</b> Labour-intensive sectors Job creation Entrepreneurship Creativity and innovation Micro-, small- and medium-sized enterprises Financial services and/or institutions Resource efficiency Sustainable consumption and/or production <b>Decent</b> Unemployment Slavery and human trafficking Child labour <b>Labour</b> Health and safety in workplace Migrants Sustainable tourism Developing countries <b>Least developed countries</b>
<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE 	Resilient infrastructures Industrialization (inclusive and sustainable) Employment <b>Least developed</b> Developing countries Value chains and markets Resource-use efficiency <b>Technologies (clean and environmentally</b> <b>Research and development</b> <b>Innovation</b> Industrial diversification
<b>10</b> REDUCED INEQUALITIES 	<b>Inclusion (social, economic and</b> <b>Inequalities reduction</b> Non-discrimination and/or policies <b>Social</b> Social protection policies Financial markets and institutions monitoring Migration and mobility policies
<b>11</b> SUSTAINABLE CITIES AND COMMUNITIES 	Affordable housing Transportation systems (inclusive and sustainable) Sustainable urbanization Human settlement planning Cultural heritage Natural heritage Mortality caused by environmental disasters Urban footprint Urban air quality Urban waste management Public spaces (safe, inclusive, accessible, green) Regional development planning Least developed countries
<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION 	Sustainable consumption Sustainable production Developed countries Developing countries Natural resources management Food waste Food losses Waste management (prevention, reduction, recycling, reuse) Pollution management

**TARGETS***Choose from the suggested words*

Reporting sustainability information    Public procurement  
Sustainable tourism



Climate-related hazards    Natural disasters    Climate-change measures  
Climate-change capacity (mitigation, adaptation, impact reduction, early-warning)



Marine pollution    Marine ecosystems    Coastal ecosystems    Ocean acidification  
Overfishing  
Fishing practices    Aquaculture    Tourism    Marine technology    Marine biodiversity



Terrestrial ecosystems    Forest management    Desertification    Land degradation  
Biodiversity  
Deforestation    Afforestation and/or reforestation    Species in threat  
Species under protection (flora and/or fauna)    Wildlife products    Invasive alien species  
Local livelihood opportunities



Accountable institutions    Inclusive institutions    Transparent institutions    Violence  
Eliminate exploitation of children    Equal access to justice    Organized crime    Corruption  
and/or bribery  
Non-discriminatory laws



Multi-stakeholder partnerships    Developing countries    Tax collection    Debt sustainability  
Debt financing    Cooperation on science/technology/innovation  
Technology (development, transfer, dissemination, diffusion)  
Technology and innovation capacity-building