COURSE OUTLINE

(1) GENERAL

SCHOOL	Social Sciences		
ACADEMIC UNIT	Sociology		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	761	**SEMESTER**	5th
COURSE TITLE	Special Topics: Artificial Intelligence and Digital Risk Society		

INDEPENDENT TEACHING ACTIVITIES *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*	WEEKLY TEACHING HOURS	CREDITS
	3	6
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Compulsory Elective/Seminar/Special background
PREREQUISITE COURSES:	Priority will be given to students that have been successfully tested in the compulsory course "Sociology of Risk and Uncertainty" and compulsory elective course “Sociology of Science and Technology”.
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	Yes (written essay in English)
COURSE WEBSITE (URL)	

(2) LEARNING OUTCOMES

Learning outcomes

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.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

By attending the course and studying the suggested literature, students are expected to be able to do the following by the end of the semester:
-Understand how the self and institutions are reshaped in a hybrid society,
-deepen their understanding of new theorizations of risk,
-dive into critical posthumanisms approaches,
-deepen their understanding of theoretical approaches to the sociology of artificial intelligence, algorithms, and big data,
-understand the challenges that digital technologies create for social research,
-be able to interpret current hybrid risks, choosing from specific examples.

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?

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

- Criticism and self-criticism.
- Demonstrate social, professional and ethical responsibility, as well as sensitivity regarding gender issues.
- Generation of new research ideas.
- Promotion of free, creative and inductive thinking.
- Respect for diversity and multiculturalism.

(3) SYLLABUS

This seminar delves into the digital risk society as it's shaped by the age of artificial intelligence (AI), algorithms, big data, and hybrid conditions through socio-physico-technical arrangements. It draws on a combination of fields, including the sociology of risk and uncertainty, the sociology of science and technology, the sociology of AI/algorithms and big data, and digital sociology. The workgroups will begin by examining approaches that focus on new theorizations of risk, such as the global "digital freedom risk," the "digital risk society," or "cyber-risk." These topics will be explored in conjunction with critiques regarding the explanatory limitations of social theory and its disregard for "non-human others," as well as how heterogeneous actors/entities interact and create conditions of risk within the framework of relational materiality. Within this context, aspects of both "algorithmic agency" and "algorithmic resistance" are highlighted. Subsequently, students will delve into how identities are formed and how institutions are transformed under conditions of reflexive modernity, which is inextricably linked to, among other things, globalization, new systems of mobility, the "new individualism," and new forms of embodiment. The course will also cover the characteristics of today's hybrid society and new forms of networking, the relationship between techno-science and society, and the challenges created for social research. Through these topics, the seminar highlights both the significance of risk as a structural characteristic of today's "algorithmic societies" and the new forms of emotional experience in the age of "algorithmic intimacy." These phenomena are examined with a focus on AI, algorithms, big data, and conditions of extensive digitalization, which make risks fluid, unpredictable, and difficult to control or produce through uncertain forms of knowledge and research practices. Consequently, the political, ethical, and legal frameworks concerning digital technologies are shaped by terms of (in)security, leading to a decline in trust in science, institutions, and human relationships. From this perspective, issues such as the digital divide and digital rights are explored. Special emphasis is placed on aspects of datafication, dataveillance/liquid surveillance, and the reproduction of biases through "opening the black boxes." The central issues that arise in relation to AI technological systems concern non-evaluative neutrality and inherent opacity, a lack of accountability, a lack of responsibility, a lack of discretion and empathy, and the reproduction of inequalities and discrimination. The above topics serve as a bridge for the analysis of specific examples in fields such as governance, labor, environment, education, immigration, health, sports, leisure, crime, and social control, highlighting aspects of today's hybrid risks.

Week 1: Presentation of the syllabus and introduction to the seminar's content.

Week 2: Introduction: The reshaping of the self and institutions in a hybrid society.

Week 3: New theorizations of risk.

Week 4: The explanatory limits of social theory and the disregard for "non-human others."
Week 5: Theoretical approaches to the sociology of AI, algorithms, and big data.
Week 6: Digital technologies and challenges in social research.
Week 7: Datafication, dataveillance, and biases: "Opening the black boxes."
Week 8: The (in)secure framework of politics, ethics, and law for AI, algorithms, and big data. "Fluid" digital rights.
Week 9: AI, algorithms, big data, and society: Risks in the fields of politics, governance, and the "digital state."
Week 10: AI, algorithms, big data, and society: Risks in the fields of labor, education, and migration.
Week 11: AI, algorithms, big data, and society: Risks in the fields of health, the environment, leisure, and sports.
Week 12: AI, algorithms, big data, and society: Risks in the fields of crime, social control, and criminal justice.
Week 13: Review of the course's thematic units and reflection.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face-to-face
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	Use of ICT in teaching and communication with students.
TEACHING METHODS *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*	
STUDENT PERFORMANCE EVALUATION *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.*	**Language of evaluation**: Greek – English. **Methods and criteria of evaluation:** a) Active presence and participation in the Seminar based on the literature prescribed for the Seminar (20% of final grade), b) Seminar assignment (undertook by groups of two or three students) in collaboration with the tutor. Presenting of the assignment during the Seminar after three meetings with the tutor (30% of final grade), c) Seminar assignment submission in written form at the end of the semester (30% of final grade). The assignment is to be 7,000 words in length, that is 15 A4 pages, Calibri, 11 point font size, 1.15 line spacing). The course includes lectures, papers presentations, discussions, screenings of audiovisual material and written essay .

Activity	*Semester workload*
Lectures	39 hours
Study and analysis of the existing report	61 hours
Progress report	10 hours
Essay Supervision	20 hours
Essay Write – up	40 hours
Essay Presentation	10 hours
Course total	***180 hours (6 ECTS)***

(5) ATTACHED BIBLIOGRAPHY

- Προτεινόμενη Βιβλιογραφία

α) **Εγχειρίδια του μαθήματος**

Γεωργοπούλου, Π. (2024). *Κριτικός μετανθρωπισμός. Η κοινωνική θεωρία στην τροχιά της τεχνολογίας*. Αθήνα: Παπαζήση.

Fuchs, C. (2023). *Μέσα κοινωνικής δικτύωσης. Μια κριτική εισαγωγή*. Αθήνα: Ροπή.

Τύμπας, Τ. (2018). *Αναλογική εργασία, Ψηφιακό Κεφάλαιο*. Αθήνα: Angelus Novus.

Β) **Συμπληρωματική βιβλιογραφία**

Elliott, A., (Ed.), (2021). *The Routledge Social Science Handbook of AI*. London: Routledge.

Elliott, A. (2016). *Identity Troubles. An introduction*. London: Routledge.

Κουρούτζας, Χ. (2025). Τεχνητή Νοημοσύνη και Ψηφιακή Κοινωνία της Διακινδύνευσης. Στο: Ι. Τσίγκανου (επιμ.) Πρακτικά 9ου Τακτικού Συνεδρίου Ελληνικής Κοινωνιολογικής Εταιρείας «1974 – 2024 Κοινωνία και Κοινωνιολογία στην Ελλάδα πενήντα χρόνια από την αποκατάσταση της δημοκρατίας», Αθήνα 30 Οκτωβρίου – 1 Νοεμβρίου 2024.

Lupton, D. (2016). Digital Risk Society. In A. Burgess, A. Alemanno and J. Zinn (eds.), *The Routledge Handbook of Risk Studies* (pp. 301-309). London: Routledge.

Lupton, D. (2014). *Digital Sociology*. London: Routledge.

Lynch , M. (ed., 4 Volume Set) (2011). *Science and Technology Studies*. London and New York: Routledge.

-<u>Συναφή επιστημονικά περιοδικά</u>:

AI and Society
American Journal of Sociology
Big Data and Society
BioSocieties
Critical AI
European Journal of Sociology
Journal of Metaverse
Science and Technology Studies
Science, Technology and Society