Technology, Education, Culture

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The course presents an original theoretical discourse analysing intersection and interaction of three fields: technology, education and culture.

The general aim of the course is presenting to the students an open-minded concept of technology, education and culture. The concept shows their multidisciplinary and multicultural nature, illustrates that they are historically and culturally conditioned. The course fosters the students' research and analytical skills.

The course consists of three parts:

- Methodology of cultural studies on one hand, and history of the mankind culture on the other hand, serving as the theoretical basis for studying the technology phenomenon of the 21-th century.
- Fundamentals of education, considered both as a cultural phenomenon, and as an academic discipline.
- The concept of technology as a cultural phenomenon. Analysis of that cultural phenomenon from the philosophical and the sociological points of view for understanding and studying of a so-called Digital Society.

By the end of the course the students should:

- know basic principles and concepts of the cultural studies methodology;
- be able to reveal interrelations between theoretical discourses and historical tendencies of development of a society;
- be aware about basic principles, concepts and up-to-date trends of education, both in the historical and the cultural contexts;
- understand technology as a multidisciplinary cultural phenomenon, know its philosophical basis, social values and practical importance.
- recognise the Digital Society as a new cultural form having specific properties associated with phenomena of social media, big data and on-line personality.

Syllabus

1. Introduction. The main goals of the course. The structure of the course. Grading policy. Requirements. Assignments.

2. The concept of Culture. Cultural studies. The structure of Culture. Space of Culture. Three-dimensional model of the Cultural space. Axes of the Cultural space: values, knowledge and regulations. Faces of Culture: spiritual, social and technological cultures. Paradigms of Culture, cultural forms.

3. Culture vs. Nature. History of Culture. Evolution of Culture: Ancient, Middle Age, Renaissance, Enlightenment, Modern, Post-modern.

4. Fundamentals of pedagogy. History of pedagogical ideas: from Confucius to Papert: Aristotle, Bacon, Comenius, Locke, Rousseau, Hegel, Pestalozzi, Mannheim, Dewey, Piaget. Main pedagogical concepts. Instructionism. Constructionism.

5. Recent pedagogy. New pedagogical ideas. Social vs. Individual. Technology Education. Education in Digital Society.

6. The concept of technology. Definitions of Technology. Philosophy of technology. Two approaches in Philosophy of technology.

7. Engineering vs. Humanitarian approaches to Philosophy of technology. Ernst Kapp, Friedrich Dessauer.

8. Philosophy of technology in XX century. Mumford, Ortega, Spengler, Elul, Piaget, Papert. Neutral vs. Value-Laden and Autonomous vs. Humanly Controlled approaches to technology. Heidegger, Marcuse, Feenberg.

9. Information and communication technology. History of the concept. Cybernetics. Turing, Shannon, Weiner, von Neuman.

10. Fundamental concepts of Computer technologies. Automata. Algorithm. Feedback. Optimisation. Ontology of computing.

11. Philosophy of information technologies. Floridi's philosophy of information. Meaningful data vs. Information.

12. Fundamentals of Digital Society. Culture of Digital Society. Cultural phenomena of Digital Society: Social Media, Personal Identity on-line, data intensive science.

Bibliography

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Floridi, L. (2011). *The philosophy of information*. Oxford: Oxford University Press.

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Mitcham, C. (1994). Thinking through technology: The path between engineering and philosophy. University of Chicago Press.

Papert, S. (1980). Mindstorms: Children, computers, and powerful ideas. Basic Books, Inc..