



## Department of Cultural Studies

General information		
Name of the course	Artificial intelligence and communication in culture	
Course instructor	Benedikt Perak	
Study programme	Graduate study programme in Cultural studies	
Status of the course	Elective	
Year of study	2022-2023	
Language	English	
ECTS credits and manner of instruction	ECTS credits	5
	Number of class hours (Lectures + Exercises + Seminars)	30+0+15

1. COURSE DESCRIPTION
<b>1.1. Course objectives</b>
Students should understand the social and cultural implications of digitalization of society and computer-aided communication systems based on the application of artificial intelligence. Students will demonstrate the application of theories, resources, methods, and tools of machine learning in the domain of communication technology design and their critical judgment.
<b>1.2. Course enrolment requirements and entry competences required for the course</b>
No prior knowledge is necessary
<b>1.3. Expected course learning outcomes</b>
1. Understand and valorize the stages of digitalization of civil society and valorize the application of artificial intelligence in the development of cultural practices.
2. Identify and analyze the identity, political, economic and cultural implications of the application of artificial intelligence and digital communication technologies in the field of culture
3. Compare different types of 'natural' and formal language depending on the identity of the speaker
4. Interpret and analyze the relationship between social regulation, legislative framework and market innovation in the field of artificial intelligence
5. Explain the formalization of natural language in the processes of natural language processing
6. Understand and valorize the principles of learning neural networks as a component of the development of artificial intelligence in the field of language and communication
7. Apply communication technologies and methods for natural language processing and conversation design in social and cultural interaction environments
8. Analytically re-examine the social place and role of the language of digital-technologically mediated

communication in the sphere of culture

9. Critically analyze the basic features of the use and influence of artificial intelligence in the sphere of culture

10. Explain the basic elements of computer-aided communication technologies and their business applications for the development of social and cultural interaction processes.

#### **1.4. Course content**

1. History of industrial revolutions and digitalization of civil society. Application of artificial intelligence in the development of cultural practices.

2. Implications of the application of artificial intelligence and digital communication technologies in the field of cultural phenomena.

3. Social regulation, legislative framework and market innovations in the field of artificial intelligence.

4. Formalization of natural language in the processes of natural language processing. Language tasks: segmentation of language structures, identification of noun entities, text summarization, answering questions, text classification.

5. Principles of learning neural networks. Deep learning architectures.

6. Application of collaborative technological frameworks and language models for the design of conversations and the implementation of conversational assistants in social interaction.

7. Analysis of business applications and the impact of artificial intelligence in the field of culture.

#### **1.5. Manner of instruction**

- ✓ Lectures
- ✓ Exercises
- ✓ Fieldwork
- ✓ Individual assignments
- ✓ Multimedia and network
- ✓ Mentorship
- ✓ Other: consultations