UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Communication and Artificial Intelligence

2627-1-E2006P042

Learning area

3: Techniques, tools, and technologies of communication.

Learning objectives

Knowledge and Understanding:

- Understand the basic principles of generative AI and large language models (LLMs), their historical roots, and how they function.
- Integrate AI tools into communication processes, from automated content creation to message personalization.
- Recognize what AI can and cannot do, its limitations, biases, and associated risks, with particular attention to sustainability and social impact.

Applying Knowledge and Understanding:

- Apply prompting techniques to generate texts and images.
- Evaluate the quality and effectiveness of AI-generated content.

Making Judgments:

- Develop the ability to use AI tools responsibly and consciously within communication contexts.
- Cultivate critical awareness of the epistemological and cultural implications of the concept of artificial intelligence and of its differences from human intelligence.

Communication Skills:

- Develop the ability to use generative AI tools to support and enhance one’s communication skills.
- Design and adapt content for different audiences and formats (texts, images), gaining critical awareness of the communicative modes that emerge from interaction with AI.

Learning Skills:

- Develop the ability to independently explore generative AI tools and models, acquiring a learning method that enables continuous updating in response to technological evolution and its applications in communication processes.

Contents

The course introduces students to the fundamentals of generative artificial intelligence and its impact on communication processes. Through a hands-on, laboratory-based approach, students will explore how AI models function (from their historical origins to modern Large Language Models) and engage in practical prompting activities for the creation and optimization of textual and visual content. At the same time, the course will address the risks and challenges associated with AI (bias, sustainability, misconceptions) and the ethical and epistemological implications associated with the use of these technologies in the field of communication, fostering not only technical understanding but also critical awareness.

Detailed program

During the laboratory, the following topics will be addressed:

- Definition and historical background of generative artificial intelligence
- Data, training, and bias
- Generative AI and communication
- Fundamentals of prompt engineering for text and image generation
- Customization and evaluation of AI-generated content
- Critical reflections on AI and communication

Prerequisites

None in particular

Teaching methods

Each lab section consists of 32 hours, organized into 8 sessions of 4 hours each. Attendance is mandatory for at least 75% of the course, corresponding to a minimum of 6 full sessions. No exceptions will be made.

Each session includes a combination of theoretical lessons and practical activities carried out individually or in small groups. Given the laboratory-based nature of the course, active student participation through discussions and debates will be encouraged even during theoretical sessions.

Assessment methods

Assessment is based on practical exercises and assignments completed throughout the laboratory. Students will also be required to carry out a group project to be submitted by the end of the course.
Note: Students who have not attended at least 6 full sessions will not be allowed to receive credit for the laboratory, even if all assignments and the group project have been completed.

Textbooks and Reading Materials

Course slides.

Reference text:
Paolo Cherubini, *Intelligenze. Ragionamento Umano e IA a Confronto*. Carocci, Roma.

Additional reference materials will be communicated during the lessons and, when possible, made available through the e-learning platform.

Although this laboratory is held in Italian, Erasmus students may access alternative course materials in English (upon request to the professor) and complete the coursework in English if they prefer.

Sustainable Development Goals

QUALITY EDUCATION | RESPONSIBLE CONSUMPTION AND PRODUCTION