UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Artificial Intelligence

2526-2-F9201P033

Aims

The course aims to introduce students to the fundamental concepts of Artificial Intelligence (AI), with a particular focus on its applications in communication and cultural contexts.
The main objectives are:
• to understand the historical evolution and basic paradigms of AI;
• to acquire conceptual tools to interpret AI technologies in relation to communication;
• to learn and critically use generative AI tools for text, image, video, and audio production;
• to analyze the ethical, social, and cultural implications of AI;
• to explore new approaches such as Agentic AI and the future perspectives of AI in digital media.

Contents

The course covers the theoretical foundations and applications of Artificial Intelligence, with special emphasis on generative technologies.
After an introductory overview of paradigms and basic tools, the program explores the applications of AI in the production and circulation of communicative and multimedia content. Case studies from journalism, advertising, publishing, and social media will be analyzed.
Lectures will be complemented by hands-on activities with widely used platforms (ChatGPT, Copilot, Deepseek, Claude, and so on), in order to develop both critical and practical skills.
Special attention will be devoted to ethical and social issues, as well as to emerging approaches based on agents (Agentic AI) and the future role of AI in communication.

Detailed program

Introduction to Artificial Intelligence
• Definitions and historical overview.
• Main AI paradigms.
• Relations between AI and communication.
• First exercises with generative platforms.

Fundamental Concepts and Tools
• How AI systems work (conceptual approach).
• Focus on Large Language Models.
• Current limitations and potentials of AI.
• Popular platforms of generative AI and their critical use.

Generative AI and Languages
• Generative AI for text, images, audio, and video.
• Applications in assisted writing, storytelling, and translation.
• Aesthetic and narrative analysis of generated content.
• Practical labs: production and comparative evaluation.

AI in Communication and Digital Media
• Chatbots and virtual assistants.
• Recommendation systems and personalization.
• Computational journalism and assisted creativity.
• Case studies in media and social networks.

Ethical, Social, and Cultural Issues
• Bias and stereotypes in generative models.
• Intellectual property and copyright.
• Impact on creative industries and cultural labor.
• AI as a social actor in public communication.

New Approaches and Future Perspectives
• Introduction to Agentic AI.
• Social simulations and communicative applications.
• AI as a creative and cultural partner.
• Final discussion and student project presentations.

Prerequisites

Basic knowledge on the use of AI platforms

Teaching form

The course combines lectures with practical exercises conducted on students' personal computers. The Moodle platform will be used to support teaching and learning activities. Seminars led by experts will address applications of Generative AI technologies to real-world problems. The course will be delivered in Italian, although part of the teaching materials will be provided in English.

Textbook and teaching resource

S.J. Russell, P. Norvig, “Intelligenza Artificiale: un approccio moderno“, 2a edizione, Pearson - Prentice Hall, 2010 (volume 1)

Gilad Abiri Generative AI as Digital Media (https://arxiv.org/abs/2503.06523)

Semester

First semester

Assessment method

Active participation: 20%
Short exercises: 30%
Final project: 50%

Office hours

On demand

Sustainable Development Goals

DECENT WORK AND ECONOMIC GROWTH