UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Juridical and Social Issues in Information Society

2324-1-FDS01Q005

Learning objectives

The course "Juridical and Social Issues in Information Society" is divided into two modules: one focuses on the ethical and legal questions arising from the transformation of society into an Information Society (Professor Ricci), and the other addresses social issues (Professor Masiero).
Regarding the module on ethical and legal issues (Professor Ricci), the course aims to provide students with theoretical and argumentative tools that are useful for developing critical thinking in students who will be directly working with technologies in the field of the Information Society. Discussing ethical cases will be an integral part of this objective. Additionally, since ethics also encompasses the law, regulations concerning the main aspects of interest for Data Science students will be analyzed. Specifically, the General Data Protection Regulation (GDPR) and the proposed Artificial Intelligence Act (AIA) will be examined.
The goal of the module "Social Issues in Information Society" (Professors Roberto Masiero and Camilla Bellini) is to prepare students to understand the impacts and confront the challenges posed by the Data Revolution on the economy and society. This module plays a crucial role in providing students with a comprehensive understanding of the domains that will benefit the most from the Data Revolution and in assisting them in pursuing a successful professional career path in the future. While students will progressively learn to use the methodologies and technical tools that constitute the main content of the overall Master of Science in Data Science, the module should also equip them to seek, identify, and comprehend the meaningful patterns of social, environmental, and economic phenomena, as well as the philosophical and ethical implications associated with the Data Economy.

Contents

The module "Juridical Issues in Information Society" analyzes the ethical and legal questions that arise from the pervasive use of technology in the process of informatization and digitalization across various sectors of society, with particular reference to the areas of bioethics, personal data protection and artificial intelligence.

The module "Social Issues in Information Society" covers the following topics:
• Introducing key social issues in the information society

• Exploring the impact of digital innovation on employment and wealth distribution
• Addressing challenging social and philosophical issues in the information society
• Examining the evolving role of the data scientist, including new job opportunities and future industries
• The Game: A discussion on the technological and mental revolution that has brought us from the vision of the 1900s to the concept of "Augmented Humanity."

Detailed program

Juridical Issues in Information Society, Prof. Stefano Ricci

The course will be divided into two parts:
• A general part that deals with distinguishing and identifying technical and ethical-legal problems. It will explore philosophical perspectives that support different conceptions of technological development and its influence on the law-making process in this field. It will also cover specific domains benefiting from the data revolution, such as medicine.
• A special part dedicated to the General Data Protection Regulation (GDPR) and the proposal for the Artificial Intelligence Act.

Social Issues in Information Society, Prof. Roberto Masiero & Camilla Bellini
• Course Introduction: Main objectives, contents, and methodology - From the Cognitive Revolution to the Information Society
• How ICTs (Information and Communication Technologies) are changing the philosophy, ecology, and ethics of information. Exploring the Digital Revolution, interfaces, and protocols. Introduction to the concept of the "Infosphere."
• Technological and Scientific Revolutions - The Fourth Revolution
• Identity and privacy in the onlife world - Personal identity, self-concept, and social self
• Political and Environmental Issues in the digital world
• How ICTs are changing society: The impact of the Internet and the Network Society
• How ICTs are changing the economy and enterprises - The Platform Economy
• Theoretical social and ethical issues related to Artificial Intelligence - Datafication and Data justice
• The impact of digital innovation on growth, employment, and wealth distribution

Prerequisites

Basic understanding of legal concepts and principles.
Familiarity with the social and ethical implications of technology (ex. mobile, cloud, social networks, big data, IoT).
Knowledge of the digital transformation and its impact on society.
Understanding of data science and its relevance to the information society, awareness of key regulations and laws related to data protection and artificial intelligence.
Interest in exploring the intersection of law, ethics, and technology in the information society.

Teaching methods

Juridical Issues in Information Society, Prof. Stefano Ricci:
• E-learning platform
• Frontal lectures

• Discussion of ethical-legal cases
• Guest lectures by experts on specific topics
• The lectures for Ricci's module will be conducted in-person.

Social Issues in the Information Society, Prof. Roberto Masiero & Camilla Bellini:
• Lectures
• E-learning platform

Assessment methods

Juridical Issues in Information Society, Prof. Stefano Ricci:
• There are no partial exams.
• The exams will consist of eight multiple-choice questions and three open questions.
• Each correct answer is worth 3 points. Eleven correct answers result in a grade of 30 cum laude. Optional oral at the request of either the student or the lecturer.
• Important information: For students who enrolled in the course in previous years, the exam will be conducted in the language of their year of enrollment, which could be English or Italian. However, the program remains the same as outlined in this syllabus.
• The final grade will be recorded once the student has taken the exam for both modules (Juridical and Social/Ricci-Masiero). Students must register separately for each module and preferably take both exams in the same session.

Social Issues in the Information Society, Prof. Roberto Masiero & Camilla Bellini:
• Written Exam

Textbooks and Reading Materials

Juridical Issues in Information Society, Prof. Stefano Ricci:
• Luciano Floridi, The Fourth Revolution: How the Infosphere is Reshaping Human Reality (2016) - Ed. OUP Oxford

Luciano Floridi's text provides an introductory overview of the subject, which will be explored in depth with reference to bioethics, personal data protection and the regulation of artificial intelligence. The material to pass the exam is therefore made up of Luciano Floridi's book and the texts - especially regulations and standards - that will be pointed out in the slides that are an integral part of the material on which the exam is based - EU GDPR; EU AI act (AIA) proposal.

Social Issues in Information Society, Prof. Roberto Masiero & Camilla Bellini:
• Luciano Floridi, The Fourth Revolution: How the Infosphere is Reshaping Human Reality (2016) - Ed. OUP Oxford
Luciano Floridi, The Ethics of Artificial Intelligence -- Principles, Challenges and Opportunities, 2022
• Alessandro Baricco, The Game, Einaudi, 2018
• A detailed list of additional papers and articles will be provided during the course.

Sustainable Development Goals