Testi del Syllabus

Resp. Did.	**PICCARDO GIORGIO**	**Matricola: 352910**

Docente	**PICCARDO GIORGIO, 6 CFU**

Anno offerta:	**2024/2025**
Insegnamento:	**JP01 - COMPETING IN THE AGE OF AI**
Corso di studio:	**LM21DSM - DATA SCIENCE AND MANAGEMENT**
Anno regolamento:	**2023**
CFU:	**6**
Settore:	**ING-INF/05**
Tipo Attività:	**D - A scelta dello studente**
Anno corso:	**2**
Periodo:	**Secondo Semestre**

Testi in inglese

Instructional goals	Artificial intelligence (AI) makes it possible for machines to learn from experience, adapt to new inputs and perform human-like tasks. Most AI examples that you hear about today – from chess-playing computers to self-driving cars – heavily rely on deep learning and natural language processing. Using these technologies, computers can be trained to accomplish specific tasks by processing large amounts of data and recognizing patterns in the data. The aim of the course is to introduce the most important topics and current challenges both from a technological and a business point of view. Indeed, artificial intelligence has transformed the way people think, learn, and work in various areas, with every company seeking to introduce Artificial Intelligence in their domain. Studying AI and Machine Learning opens up a world of opportunities to create cutting-edge technologies in diverse sectors.
Prerequisites	No prerequisites are needed to attend this course.
Intended learning outcomes	Knowledge and understanding: The course will deal with both theoretical and practical concepts to understand how the digital transformation by means of AI is wide spreading in our daily lives. This course provides knowledge and analytical resources that will enable students to understand AI technologies and their impact in business and society. Applying knowledge and understanding: Throughout the course, the students will have the opportunity to critically analyze several examples of AI-driven business case studies. Furthermore, interactive demonstrations of such case studies will be discussed. Making judgments: We expect students to be able to analyze digital systems and how they are used inside an organization. They are expected to be able to discuss and evaluate suitable solutions driven by machine learning and AI to

	solve real live case studies in business environments. Communications Skills: The course will give the students the possibility to understand terms and concepts related to digital systems. The students will be able to communicate their ideas, proposals, analysis, and critical reasoning in the digital world in the most effective and appropriate way. Learning skills: This course will allow students to understand how information and data can be used to increase productivity and problem solving in business scenarios.
Course Contents	The course is divided into five modules: - the age of AI - the AI first company - automation and AI - disruption from AI and blockchain technologies - overcoming AI challenges Issues related to cybersecurity and privacy will be discussed, we will talk about the impact that AI and automation will have on future jobs, we will examine what makes an industry ready for transformation from either AI or blockchain technology and we will talk about the overcoming challenges of developing strategy in today's AI landscape.
Reference Books	Students can find class materials on the e-learning platform (slides, lecture notes, demos).
Teaching Method	The following teaching methods will be used during the course: - Traditional Lecture - Interactive demonstration.
Assessment Method	Lectures will be conducted through standard face-to-face teaching. Towards the end of the course, students will have the opportunity to self-organize into groups and undertake small group projects, in which they will apply the AI tools discussed in class to solve a realistic scenario (to be proposed by the students ad approved by the teacher). The group project ac-counts for 100% of the grade, and the project material will be subject to evaluation. Alternatively, students can choose to prepare an individual essay on one of the topics discussed during the course, which also accounts for 100% of the grade. The group project submission material includes: - A summary (maximum 2 pages) of the scenario, the AI tools used to solve it, and some business considerations and applications. - The collection of the AI tools used. - A short PowerPoint presentation. On the other hand, students who prefer the essay option must write between 10 - 12 pages, providing a comprehensive discussion about one of the topics discussed throughout the course. The deadlines for submitting the group project and the essay will be provided on the first day of the course.
Thesis assignment criteria	None

Obiettivi per lo sviluppo sostenibile

Codice	Descrizione