LAW

2024-2025

NEW TECHNOLOGY AND PHILOSOPHY OF LAW

General information	
Year of the course	*1st year as an optional exam with eligibility - 4th year as an optional exam with grade*
Academic calendar (starting and ending date)	*Second semester: from 24 February 2025 to 30 May 2025*
Credits (CFU/ETCS):	*6*
SSD	*IUS-20 – Philosophy of Law*
Language	*English*
Mode of attendance	*Not compulsory, but strongly recommended*

Professor/ Lecturer	
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Department and address	Ionic Department in "Legal and Economic Systems of the Mediterranean: society, environment, culture" via Duomo 259, Taranto, Second Floor
Virtual room	Microsoft Teams (code xuo9kbx)
Office Hours (and modalities: e.g., by appointment, on line, etc.)	At the end of each class, by appointment via e-mail

Work schedule	
Hours	

Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
150	*48*		*102*
CFU/ETCS			
6			

Learning Objectives	The growing diffusion of new technologies affects numerous decision-making processes, including contracts, corporate governance, due diligence, creative ideas, negotiation and mediation, judicial decisions, and, in this context, defensive strategies. Tale into consideration, for example, the predictive capabilities of Machine Learning. The course intends to offer an overview of the leading legal and philosophical problems related to the application of transformative technologies in techno-law, jurimetrics, and the cases that an artificial agent can resolve in the various fields of judgment and decision-making.
Course prerequisites	There are no specific prerequisites.

Teaching strategies	The teaching methodology adopts a conceptual and theoretical perspective. Conventional lectures utilising multimedia tools (such as power point presentations) and seminar exercises for critically reading the philosophical literature on new technologies and law will be performed.
Expected learning outcomes in	

terms of	
Knowledge and understanding on:	Students will have an in-depth knowledge of the course topics. They will acquire a reasoning method suitable for addressing specific questions of the philosophy of law about use cases. They will have to acquire basic and advanced legal IT knowledge suitable for understanding the compatibility of logical and probabilistic systems with legal experience.
Applying knowledge and understanding on:	The students will demonstrate their ability to reason and decode legal language and the basic concepts of the legal order in challenging technological domains and use cases. The acquired notions will be of immediate theoretical and practical use, improving the relationship between the user and the technologies and allowing a more accurate understanding of all aspects of a constantly evolving field.
Soft skills	• *Making informed judgments and choices.* The students should demonstrate the ability to choose the use of the technologies within the environment they would operate, using the critical approaches and logical deductive skills they have acquired which are suitable for interpreting language input and normative phenomena. • *Communicating knowledge and understanding.* The students should demonstrate they have acquired communication and exhibition skills in the context of technological applications and use cases in the legal field. • *Capacities to continue learning.* The students should demonstrate they have metabolized logical-deductive reasoning schemes and methodologies applied to the legal issue on new technologies, with the possibility of immediately adopting the notions learned and the use cases studied, even outside the university context.
Syllabus	
Content knowledge	The course will introduce students to the basic concepts in the changing domain of the information society. It will also provide them with the use of technologies by jurists (i.e. Legal informatics), with particular attention to IT-legal issues related to philosophical problems. In line with the training objectives, the course offers an overview of the main problems an artificial agent can solve in the various fields of judgment and decision-making. It will introduce the concepts of a logical agent capable of carrying out deductive reasoning, a probabilistic agent capable of making decisions in the presence of uncertainties, an agent that solves problems using search algorithms, and an agent that learns to solve problems starting from the observation of data (this is the paradigm of Machine Learning until the recent declination of Deep Learning). Finally, numerical calculation systems' compatibility with the logic of judicial discourse will be verified. The course will also examine use cases in the following domains: contracts and patents; litigation and E-discovery; legal research, government Data, and access to legal information; dispute resolution, and access to justice.
Texts and readings	Daniel Martin Katz, Ron Dolin, Michael J. Bommarito (Eds.), *Legal Informatics*, Cambridge University Press, 2021 Part I – Introduction to Legal Informatics (pp. 1– 30); Part II – Legal Informatics. Building Blocks and Core Concepts

	Lett. B – Artificial Intelligence, Machine Learning, Natural Language Processing, and Blockchain (pp. 85– 120) Lett. D – Evaluation (pp. 177– 200) Part. III – Use Cases in Legal Informatics (pp. 201– 448).
Notes, additional materials	The teacher will provide the students with additional and selected didactic materials which will be uploaded to the Teams channel of the course (code xuo9kbx).
Repository	

Assessment	
Assessment methods	At the end of the course, the student will have to complete an oral exam with an individual interview. There are no intermediate tests or pre-appeals. To successfully pass the exam, the student must have a comprehensive understanding of all the topics covered. The oral interview will consist of four questions, three of which will pertain to the reference text (one question for each part) and one question related to the additional teaching material. In particular, the ability to understand the philosophical-juridical problems concerning the legal application of new information technologies, the critical analysis of the use of algorithmic and statistical-based calculation systems, and the ability to describe and identify the relevant aspects of the use cases analyzed will be verified. Finally, the candidate's capacity for independent judgment will be assessed.
Assessment criteria	• *Knowledge and understanding*. The oral exam will verify the candidate's acquisition of the basic notions on applying new technologies in the legal domain from a philosophical perspective. • *Applied knowledge and understanding*. The oral exam will also verify the candidate's ability to discuss using the concepts and theoretical tools studied during the course. • *Autonomy of judgment.* The exam will assess the candidate's acquisition of complete autonomy in critical judgment on the issues and problems faced during the course. • *Communication skills.* During the exam, the candidate must demonstrate the ability to argue logically and communicate orally the course's main topics clearly and comprehensively. • *Ability to learn.* To pass the exam, the candidate must have sufficient knowledge of the materials provided for the study program.
Final exam and grading criteria	The verification will have an open dialogue structure, starting from questions that intend to ascertain, on the one hand, the possession of the program's essential contents and, on the other hand, the critical or dialectical skills connected with the use of new technologies in the law field. The final evaluation will be expressed in an exam grade. The minimum passing grade is 18/30. In

	achieving a score of 30/30, the student may be entitled to praise for high-quality performance.
Further information	Students can submit their request for thesis assignment directly to the teacher after successfully passing the exam at least six months before the scheduled graduation session. Attending students will be preferred for assignments.