

ANX-PR/CL/001-01

LEARNING GUIDE

SUBJECT

103000835 - Ai And Legal Social And Ethical Aspects

DEGREE PROGRAMME

10AZ - Master Universitario En Innovación Digital

ACADEMIC YEAR & SEMESTER

2023/24 - Semester 2

Index

Learning guide

1. Description.....	1
2. Faculty.....	1
3. Skills and learning outcomes	2
4. Brief description of the subject and syllabus.....	3
5. Schedule.....	5
6. Activities and assessment criteria.....	7
7. Teaching resources.....	9
8. Other information.....	9

1. Description

1.1. Subject details

Name of the subject	103000835 - Ai And Legal Social And Ethical Aspects
No of credits	3 ECTS
Type	Optional
Academic year of the programme	First year
Semester of tuition	Semester 2
Tuition period	February-June
Tuition languages	English
Degree programme	10AZ - Master Universitario en Innovación Digital
Centre	10 - Escuela Tecnica Superior De Ingenieros Informaticos
Academic year	2023-24

2. Faculty

2.1. Faculty members with subject teaching role

Name and surname	Office/Room	Email	Tutoring hours *
Victor Rodriguez Doncel (Subject coordinator)	D3205	victor.rodriguez@upm.es	M - 10:00 - 13:00 Tu - 10:00 - 13:00
Asuncion De Maria Gomez Perez		asunciondemaria.gomez@upm.es	Sin horario.

* The tutoring schedule is indicative and subject to possible changes. Please check tutoring times with the faculty member in charge.

2.2. Research assistants

Name and surname	Email	Faculty member in charge
Navas Loro, Maria	m.navas@upm.es	Rodriguez Doncel, Victor

3. Skills and learning outcomes *

3.1. Skills to be learned

CB08 - Que los estudiantes sean capaces de integrar conocimientos y enfrentarse a la complejidad de formular juicios a partir de una información que, siendo incompleta o limitada, incluya reflexiones sobre las responsabilidades sociales y éticas vinculadas a la aplicación de sus conocimientos y juicios

CE-EIT04 - Capacidad para desarrollar un proyecto y un modelo completos de negocio orientados al cliente usando una metodología iterativa siguiendo los pasos necesarios para crear una empresa de base tecnológica sostenible incluyendo consideraciones éticas, sociales y medioambientales.

CE-EIT06 - Capacidad para reconocer, abordar y sugerir maneras para tratar los diferentes retos (madurez, propiedad intelectual, etc.) en el proceso de explotar una tecnología para crear un negocio.

3.2. Learning outcomes

RA97 - Ability to assess the societal, legal and ethical impact of Artificial Intelligence and data processing projects

RA98 - Knowledge of the European and national legal framework of AI and data processing

* The Learning Guides should reflect the Skills and Learning Outcomes in the same way as indicated in the Degree Verification Memory. For this reason, they have not been translated into English and appear in Spanish.

4. Brief description of the subject and syllabus

4.1. Brief description of the subject

Virtually every data scientist and AI professional will have to cope with legal and ethical issues during the professional career.

Designing, developing or using AI systems or data intensive applications imply knowing and abiding the law (legal compliance) and being aware of the technology impact and acting accordingly (ethical responsibility).

During this course, the student will learn the European Union policies and regulations around AI and data. In particular, students will learn the basics of the forthcoming AI Regulation and the AI Liability Directive, the General Data Protection Regulation, the Data Governance Act, the Data Act, some copyright law including the Database Directive. Open Data policies in Europe will also be taught.

In the second place, the students following this course will also acquire skills to make critical assessments of AI-intensive and big data projects considering legal, ethical, and societal aspects. From a theoretical perspective, critical thinking will be appreciated and fostered in students, from a practical perspective, the official positions of the European Commissions will be applied with real use cases.

4.2. Syllabus

1. Introduction. Overview of issues raised by Artificial Intelligence.
2. Introduction to ethics.
3. Professional ethics and deontological codes.
4. Methodologies for the ethical assessment of data and AI projects.
5. Bias and explainability of AI systems.
6. Privacy and Data Protection. GDPR.
7. Regulation of AI.
8. Regulation of Data.
9. Intellectual Property Rights.
10. Copyright and data licenses.
11. Identity and Security

12. Information Ethics. The future of AI.

5. Schedule

5.1. Subject schedule*

Week	Classroom activities	Laboratory activities	Distant / On-line	Assessment activities
1	Lecture. Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
2	Lecture. Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
3	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
4	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
5	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	Delivery of report and its eventual presentation Group presentation Continuous assessment Presential Duration: 02:00
6	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
7	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	
8	Lecture Duration: 02:00 Lecture		Lecture Duration: 01:00 Cooperative activities	Delivery of report and its eventual presentation. Individual work Continuous assessment Not Presential Duration: 00:00
9				Continuous Evaluation Test Written test Continuous assessment Presential Duration: 02:00
10				
11				
12				
13				
14				

15				
16				
17				Exam Written test Final examination Presential Duration: 02:00

Depending on the programme study plan, total values will be calculated according to the ECTS credit unit as 26/27 hours of student face-to-face contact and independent study time.

* The schedule is based on an a priori planning of the subject; it might be modified during the academic year, especially considering the COVID19 evolution.

6. Activities and assessment criteria

6.1. Assessment activities

6.1.1. Assessment

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
5	Delivery of report and its eventual presentation	Group presentation	Face-to-face	02:00	30%	5 / 10	CB08 CE-EIT04 CE-EIT06
8	Delivery of report and its eventual presentation.	Individual work	No Presential	00:00	30%	5 / 10	CB08 CE-EIT04 CE-EIT06
9	Continuous Evaluation Test	Written test	Face-to-face	02:00	40%	5 / 10	CB08 CE-EIT04

6.1.2. Global examination

Week	Description	Modality	Type	Duration	Weight	Minimum grade	Evaluated skills
17	Exam	Written test	Face-to-face	02:00	100%	5 / 10	CB08 CE-EIT04 CE-EIT06

6.1.3. Referred (re-sit) examination

No se ha definido la evaluación extraordinaria.

6.2. Assessment criteria

EVALUATION SYSTEM

There are three different evaluation activities:

1. QUESTIONNAIRES. During the course, Moodle questionnaires will be open as in-class activities or homework tasks. **(20%)**
2. GROUP WORK. This group work (4 students per group) will have an intermediate delivery (towards the middle of the course) and a final delivery. At the end of the course, there will be an oral presentation. **(40%)**
3. GLOBAL EXAM. This final exam will consist of a Moodle questionnaire to be filled in during the exam time evaluating all the competencies of the course (a printed version will be available for students with no electronic device). **(40%)**

EVALUATION ONLY THROUGH GLOBAL EXAM

Notwithstanding the global exam (50%), students will have to deliver the work, even if individually, and will have to record a video to replace the oral presentation (50%).

EXTRAORDINARY EXAM

Notwithstanding the global exam (50%), students will have to deliver the work, even if individually, and will have to record a video to replace the oral presentation (50%).

7. Teaching resources

7.1. Teaching resources for the subject

Name	Type	Notes
Textbook	Bibliography	Quinn, M. J. (2017). Ethics for the information age. Pearson.
Moodle	Bibliography	A collection of readings will be made available through the moodle platform. Additional recommended bibliography will be also referenced from Moodle.

8. Other information

8.1. Other information about the subject

Language. The course is delivered in English.