



Syllabus

Academic Year	2021/2022
Program	Data Science and Management
course	Privacy in the Digital World
Term	I semester
Year	2
SSD	IUS/01
Credits	6

INSTRUCTIONAL GOALS

A first goal of the course consists of building a solid background on privacy and data protection law from a European and a comparative perspective, in order to raise awareness on the legal and technical tools to protect fundamental rights in a even more digitized world.

Another goal of the class is to equip students with tools to fairly and responsibly manage personal data processing within private and public organizations and to design innovative solutions embedding legal and ethical principles by design and by default.

INTENDED LEARNING OUTCOMES

They describe what a learner is expected to know, understand and be able to demonstrate after completion of a learning path.

Knowledge and understanding:

By the end of the course, students should be able to:

- develop a critical and solid comprehension of European data protection rules;
- understand similarities and differences of privacy and data protection standards among different legal systems;
- understand the impact and the main challenges posed by digital technologies and data-driven innovation to privacy and data protection;

Applying knowledge and understanding:

Upon completing the study program, students will be able to:

- interpret and apply European data protection principles and rules;
- face personal data protection issues within private and public organizations;
- work within interdisciplinary teams;
- contribute to data science research and industrial activities;
- design innovative solutions embedding legal and ethical principles by design and by default.

Making judgements:

Upon completing the study program, students will be able to:

- apply legal and ethical reasoning in business and institutional decisions concerning data protection and privacy;
- gather and interpret information and data from different sources and disciplines, in order to make



judgements in an informed and independent way

Communications Skills:

Upon completing the study program, students will be able to:

- develop the ability to communicate in written form through completing the assignment and oral form through the final exam and the class debate;
- use the notions and the communication of privacy and data protection law;
- foster the development relational skills in international and interdisciplinary settings

Learning skills:

Upon completing the study program, students will be able to:

- build a multi-disciplinary toolbox in order to understand technological, economic and legal issues of new digital sectors;
- use the acquired knowledge to access to prominent job positions within data- driven companies and institutions and/or to access to further advanced learning programs such as PhD or Master in Data Science

Pre-requisites	Knowledge of basic legal notions of public and private law is useful for the course learning.
Course content	<p>After an introduction on the background and the foundations of privacy and data protection law from a European Union and a comparative perspective, the course will analyse the key principles and rules of European data protection law, as well as data subjects' rights and enforcement.</p> <p>The course will then explore the main privacy and data protection challenges of digital technologies, including:</p> <ul style="list-style-type: none">• the impact of big data and artificial intelligence on data protection principles (e.g. transparency and explainability of automated personal data processing; accountability of algorithm based decision-making in the private and in the public sector; purpose limitation, anonymisation and the risks of de-anonymisation of personal data);• concerns relating to profiling, labelling and scoring individuals and groups, especially through digital advertising and other tracking mechanisms;• platforms' market power and consumers' personal data;• risks of manipulation and exploitation of vulnerabilities, discrimination and fraud;• Internet of Things and the risks of surveillance in private and public spaces;• open data and personal data protection issues;• tools and techniques to empower individuals with awareness and control of personal data flows
Reference Books	<p>Slides, materials and research papers will be listed and made available on the e-learning platform.</p> <p>Recommended readings: European Union Agency for Fundamental Rights and Council of Europe, Handbook on European data protection law - 2018 edition</p>
Teaching Methods	Face-to-face teaching and case studies will be complemented by practical exercises (both individual and group works) and seminars with experts and key figures. Interdisciplinary sessions will be organised as well. Students' participation during lectures is strongly encouraged.
Assessment	<p>The exam consists of (i) a midterm written exam, (ii) a project work and (iii) a final oral exam.</p> <p>In the midterm exam and in the final oral exam students are required to demonstrate that:</p> <ul style="list-style-type: none">• they have developed a critical and solid comprehension of European data protection rules;• they have an in-depth understanding of the similarities and differences of privacy and data protection standards among different legal systems;• they understand the impact and the main challenges posed by digital technologies and



data-driven innovation to privacy and data protection;
• they are able to interpret and apply European data protection principles and rules.
Midterm written exam and final oral exam will count for 40% of the grade each.

In the project students are required to demonstrate that they are able to:

- face personal data protection issues within private and public organizations;
- work within interdisciplinary teams;
- apply legal and ethical reasoning in business and institutional decisions concerning data protection and privacy;
- gather and interpret information and data from different sources and disciplines, in order to make judgements in an informed and independent way;
- design innovative solutions embedding legal and ethical principles by design and by default.

The project will count for 20% of the grade.

The overall assessment will take into account the level of knowledge and understanding of privacy and data protection issues; the knowledge of key principles and rules of the European data protection law; the capacity for thinking creatively, logically and critically; and the capacity to present effectively findings and conclusions.
