



## UNIVERSITÀ DI PISA BIOECONOMY LABS

---

### SONIA MASSARI

Anno accademico	2023/24
CdS	SISTEMI AGRICOLI SOSTENIBILI
Codice	002NG
CFU	6

Moduli	Settore/i	Tipo	Ore	Docente/i
BIOECONOMY LABS	AGR/01,IUS/03	LABORATORI	64	LUCA LEONE SONIA MASSARI

#### Obiettivi di apprendimento

##### *Conoscenze*

The course will be structured in 2 modules running in parallel to provide a general overview on the concept of “bioeconomy” in knowledge-based and innovation-driven European Union.

The main objective will be to critically scrutinize the normative framework and evolution correlated to the implementation of bioeconomy in the agrifood domain. To this end, the topics of co-creation and co-design as key tools for Living Labs will be used to stimulate students' collaborative creativity to design and imagine emerging food scenarios.

##### *Modalità di verifica delle conoscenze*

- Ongoing assessment to monitor academic progress will be carried out in the form of groups of students developing the project

##### *Capacità*

At the end of the course, the student will be able to critically describe and analyse, from a normative perspective, the legal tools designed by the EU institutions to accelerate progress towards a circular and low-carbon economy. In this respect, the student is expected to be able to successfully deliver a critical analysis and discussion of bioeconomy-related legal issues, using suitable and proper technical language. From an economic viewpoint, the student will be able to: use design thinking methods to make sustainability compelling, impactful and realizable; analyze contextual, functional and human-centered design thinking techniques to promote sustainable design of products and services, by considering social space, form, environment, energy, economics, and health; integrate solutions that draw on different disciplines.

##### *Modalità di verifica delle capacità*

During the computer lab sessions, small projects will be carried out

##### *Comportamenti*

- Students will acquire and/or develop an awareness of environmental issues
- Students will be able to manage the responsibility of managing a team project

##### *Modalità di verifica dei comportamenti*

- During the lab sessions, the accuracy and precision of the activities carried out will be evaluated
- During group work, the methods of assigning responsibility, management and organisation during the project phases will be evaluated

##### *Prerequisiti (conoscenze iniziali)*

Attendance at lessons is encouraged and highly recommended. No requirements are needed for attending the course. However, interest and intellectual curiosity for an economic-legal reflection on the agricultural sector is expected.

##### *Indicazioni metodologiche*

The teaching method will embrace the following activities:



## UNIVERSITÀ DI PISA

---

- Presentations of case studies aimed at learning how to approach the vast array of legal documents.
- Class discussions aimed to critically deconstruct legal rules and courts' rulings.
- Use of Design Thinking, that is a methodology combining creativity, human values centeredness, design skills, critical thinking and building practical solutions to address undefined challenges.

Students will be required to attend the classes and to actively participate in the discussions.

### Programma (contenuti dell'insegnamento)

The following topics will be touched upon in Module 1 (on Wednesdays)

- Food packaging legislation
- Plastics in agriculture
- Food loss and waste
- Alternative proteins
- Soil health and monitoring
- Food standards and certification

Potential topics that will be explored through co-design in Module 2 include (on Mondays)

- innovative food products,
- food design
- biodesign
- circular living
- social sustainability traceability solutions.

### Bibliografia e materiale didattico

Reading materials will be provided during the class.

### Modalità d'esame

The final evaluation will be based on:

- Attendance and participation in class
- Team presentation in class for Module1
- Team project design for Module 2.

Assessment aims at evaluating the student's ability to reason and rigorously analyse the topics covered during the course, as well as the proper use of terminology to explain bioeconomy-related issues. The correct use of the English language will be also evaluated, together with the capacity of linking issues to each other through a critical approach.

*Ultimo aggiornamento 06/10/2023 11:44*