General information	
Academic subject	Technology management of wastes for food production
Degree course	INNOVATION DEVELOPMENT IN AGRIFOOD SYSTEMS (IDEAS)
ECTS credits	3 ECTS (2 ECTS of Lectures + 1 ECTS of laboratory or field classes)
Compulsory attendance	No
Teaching language	english

Subject teacher	Name Surname	Mail address
	Michele Faccia	michele.faccia@uniba.it

ECTS credits details		
	2 ECTS Lectures	1 ECTS Laboratory or filed classes

Class schedule	
Period	1 semester
Course year	First
Type of class	Lectures Practical classes Educational tours

Time management	
Hours	76
In-class study hours	30
Out-of-class study hours	46

Academic calendar	
Class begins	October 5th, 2020
Class ends	January 22th, 2021

Syllabus	
Prerequisites/requirements	Prerequisites: "Chemistry", "Microbiology" Requirements: Inorganic and organic chemistry, Food microorganisms and constituents.
Expected learning outcomes	***Knowledge and understanding*** o Flow diagrams of the most important foods o Understanding the origin of food wastes ***Applying knowledge and understanding*** o Evaluating suitable strategies for reducing food wastes during processing o Understanding reutilization of food wastes in the food chain ***Making informed judgements and choices*** o. Making a right judgment on the quality characteristics of food wastes o Ability in correctly addressing the choice for their valorization on the basis of their characteristics ***Communicating knowledge and understanding*** o. Communicating the importance of the correct management of food wastes for the environment and of the economic sustainability within the circular economy ***Capacities to continue learning***

	o. Ability of deepening and updating knowledge about the composition of food wastes and new applications for their reutilization.
Contents	o Flow diagrams of the main food products: wine, olive oil, dairy products, meat and fish products, vegetable preserves. o Chemical characteristics of wastes and by –products from the agri-food industries o Bioactive compounds in food by-products; o strategies and technologies for the valorisation of by–products deriving from animals and plants.

Course program	
Reference books	• Lecture notes and other educational materials distributed during the classes (also made available online)
Notes	
Teaching methods	The lectures will be given with the aid of Power Point presentations, video clips, reading out of legislative texts, educational tour in agri-foods industries Lecture notes and educational supplies will be provided by means of a mailing list or online platforms (i.e.: Edmodo, Google Drive…)
Evaluation methods	The exam consists of an oral dissertation on the topics developed during the theoretical and theoretical-practical lectures in the classroom and in the laboratory/food industries Students attending at the lectures may have a middle-term preliminary exam, consisting of an oral test, relative to the first part of the program, which will concur to the final evaluation and will be considered valid for 1 year.
Evaluation criteria	***Knowledge and understanding*** Knowledge of the flow diagrams of food processing Understanding the meaning of the single operations of the process ***Applying knowledge and understanding*** Making connections with the circular economy ***Making informed judgements and choices*** Evaluating suitability of particular applications to different food wastes ***Communicating knowledge and understanding*** Correct exposure and language proficiency will be evaluated with marks of excellence. ***Capacities to continue learning***

	Interest in the field and completeness of preparation
Receiving times	Monday-Friday upon e-mail request