General Information	
Academic subject	Olive oil technology (I.C. Principles of food technologies)
Degree course	Food Science and Technologies
ECTS credits	3 ECTS
Compulsory attendance	No
Teaching language	Italian

Subject teacher	Name Surname	Mail address	SSD
	Francesco	francesco.caponio@uniba.it	AGR/15
	Caponio		

ECTS credits details		
Basic teaching activities	2 ECTS Lectures	1 ECTS Laboratory or field classes

Class schedule	
Period	First semester
Course year	Third
Type of class	Lectures
	Laboratory or field classes
	Video
	Didactic visit

Time management	
Hours	75
In-class study hours	30
Out-of-class study hours	45

Academic calendar	
Class begins	September 27 <sup>th</sup> , 2021
Class ends	January 21 <sup>th</sup> , 2022

Syllabus	
Prerequisites/requirements	Prerequisites: "Chemistry" and "Unit operations of food technology"
Expected learning outcomes	<ul> <li>Knowledge and understanding         <ul> <li>Knowledge of processes and product quality</li> </ul> </li> <li>Applying knowledge and understanding         <ul> <li>Ability to understand relations between processing technologies and vrigin olive oil quality</li> <li>Ability to apply correct solutions in relation to raw material characteristics</li> <li>Knowledge of processes and behaviors influencing hydrolytic and oxidative degradaton of oils</li> </ul> </li> <li>Making informed judgements and choices         <ul> <li>Ability to correctly address choices to ensure high standard quality for olive oils</li> <li>Ability to evaluate the influence of processes on the chemical and sensory quality of the product</li> </ul> </li> <li>Communicating knowledge and understanding         <ul> <li>Ability to describe processes and their effect on quality</li> </ul> </li> <li>Capacities to continue learning         <ul> <li>Ability at deepen and update knowledge regarding the effect of processing on quality</li> </ul> </li> </ul>
	The expected learning outcomes, in terms of both knowledge and skills, are provided in Annex A of the Academic Regulations of the Degree in Food Science and Technology (expressed through the

	European Descriptors of the qualification)
Contents	Raw materials: fruits and oily seeds Lipids: synthesis, composition, oxidative and hydrolytic degradation Classification of virgin olive oils Ripening, harvest, milling, extraction of olive oil. Comparison of different processing technologies Virgin olive oil classification Chemical and sensory quality indices Refining of edible oils
Course program	
Reference books	<ul> <li>Notes of the lectures distributed during the course.</li> <li>Ricci A. Oleum: Manuale dell'olio da olive. Edagricole, Bologna.</li> <li>Sciancalepore V. Industrie agrarie: olearia, enologica, lattiero – casearia. UTET, Torino.</li> <li>Capella P., Fedeli E., Bonaga G., Lercker G. Manuale degli oli e dei grassi. Tecniche Nuove Ed., Milano.</li> <li>Cappelli P., Vannucchi V. Principi di chimica degli alimenti. Conservazione, Trasformazioni, Normativa. Zanichelli, Bologna.</li> </ul>
	<ul> <li>Additional readings:</li> <li>Preedy V.R. Olives and olive oil in health and disease prevention. Elsevier.</li> <li>Aparicio R., Harwood J. Handbook of olive oil: analysis and properties. Springer.</li> </ul>
Notes	
Teaching methods	Lectures will be presented by means of Power Point presentations, videos with views of real industrial plants, didactic visit, case-studies and laboratory exercitations.  Lecture notes and educational supplies will be provided by means of online platforms (i.e.: Edmodo).
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/production plants, as reported in the Academic Regulations for the Bachelor Degree in Food Science and Technology (article 9) and in the study plan (Annex A). Students attending at the lectures may have a middle-term preliminary exam, consisting of a written test, relative to the first part of the program, which will concur to the final evaluation and will be considered valid for a year. The evaluation of the preparation of the student occurs on the basis of established criteria, as detailed in Annex B of the Academic Regulations for the Bachelor Degree in Food Science and Technology.
	Non-Italian students may be examined in English language, according to the aforesaid procedures.
Evaluation criteria	Conoscenza e capacità di comprensione  O Describing processes and their effects on product quality  Conoscenza e capacità di comprensione applicate  O Describing chemical and sensory changes occurring during processing  Autonomia di giudizio  O Expressing reasonable choices of processing technologies to ensure high quality standards
	Abilità comunicative  O Describing processes and their effect on quality  Capacità di apprendere

	<ul> <li>Hypothesize solutions to increase product quality</li> </ul>
Receiving times	From Monday to Friday 8.30 a.m. – 1.30 p.m. and 2.30 p.m. – 5.30
	p.m. previous agreement.