

General Information	BACELOR DEGREE IN BIOTECHONOLOGIES
Title of the subject	Food Technology
Degree Course (class)	INDUSTRIAL AND AGRI-FOOD BIOTECHNOLOGIES– Curriculum Agri-Food (L-2)
ECTS credits	6
Compulsory attendance	Yes
Language	Italian
Academic year	2020-21

Subject Teacher		
Name and Surname	Michele Faccia	
email address	michele.faccia@uniba.it	
Place and time of reception	Department of Soil, Plant and Food Sciences, section of Food Science and Technology (1st floor), via Amendola 165/a, Bari. Teacher's office hours: from Monday to Friday from 9 a.m to 16 p.m., by e-mail appointment.	
ECTS credits details	Discipline sector (SSD)	Area
	AGR 15	---

Study plan schedule	Year of study plan		Semester	
	III		2nd	
Time management	Lessons	Laboratory	Exercises	Total
CFU	4	2		6
Total hours	100	50		150
In-class study hours	32	24		56
Out-of-class study hours	68	26		94

Syllabus	
Prerequisites / Requirements	Knowledge of inorganic and organic chemistry, and of applied physics.
Expected learning outcomes (according to Dublin descriptors)	
Knowledge and understanding	Knowledge of the principles of food technology. Ability to understand the technological phases influencing the quality characteristics of food products of plant and animal origin in order to improve quality.
Applying knowledge	Ability to define the technological parameters on the basis of their effects on the composition, structure and properties of food products.
Making informed judgments and	Ability in correctly orienting the search for suitable solutions for the

choices	production of high quality foods.
Communicating knowledge	Ability to describe the elements of food technology useful for food production aimed at exchanging ideas, information, data and methodologies with specialist and non-specialist interlocutors, on issues relating to the qualitative, nutritional and health aspects of food products
Capacities to continue learning	Ability to deepen and update knowledge on the compositional, nutritional and health aspects of food and on the influence of the processing technologies.
Study Program	
Content	Principles of food technologies; composition, properties and quality of food with particular reference to the presence of factors capable of influencing human health and well-being (contaminants, antinutritional components, microorganisms, sensory characteristics). Food labelling and shelf life. Elements of technology of products of plant origin: fermented drinks, vegetable preserves, olive and seed oils. Elements of technology of products of animal origin: dairy products, meat and fish products.
Bibliography and textbooks	<ul style="list-style-type: none"> • class notes and didactic material distributed during the lessons. • Cabras P., Martelli A., Chimica degli alimenti, Piccin (Padova), 2004 • Handbook of Meat Processing. Blackwell Publishing, 2010 • Processing Vegetables: Science and Technology. Technomic Publishing CO., Inc, 1997. • Mucchetti G, Neviani E., Microbiologia e Tecnologia Lattiero-casearia, Tecniche Nuove. • Scientific Reviews
Notes to textbooks	
Teaching methods	The topics of the course will be illustrated by Power Point presentations, video films, classroom or laboratory exercises, reading of regulatory texts, educational visits to food companies. Digital tools and online platforms will also be used (personal teaching website, edmodo, google drive, mailing list, etc.) to provide study material and interact with students.
Assessment methods (oral, written, ongoing assessment)	Students enrolled in the year in which the course is held can take an oral ongoing test, consisting of 3 questions on the topics addressed during classes. The students will be evaluated by the level of knowledge demonstrated (from 0 to 5 points for each question, the minimum score to consider the test passed is 9). The outcome of this test will contribute to the evaluation of the final exam and is valid for one academic year. The exam consists of an oral test on the topics developed during both theoretical and theoretical-practical lessons in the classroom and in the laboratory. The test will be evaluated based on the level of knowledge demonstrated. The exam for foreign students can be done in English.
Evaluation criteria (describe criteria for each of the above expected outcomes)	Describing the technological phases influencing the quality characteristics of food products of plant and animal origin, with the purpose of improving it. Applied knowledge and understanding Describing the technological parameters of the process as a function of the effects on the composition, structure and properties of food.

	<p>Autonomy of judgment Describing how to orient food processing technologies to improve the compositional, nutritional and health aspects of food products.</p> <p>Communication skills Communicating with specialist and non-specialist interlocutors about issues related to food technologies, with particular reference to the compositional, nutritional and health aspects of products and the influence of the processing technologies</p> <p>Ability to learn Description of the learning methods and channels for deepening and updating knowledge on the compositional, nutritional and health aspects of food and the influence of processing technologies.</p>
Further information	