

General Information	Studies in NUTRITION SCIENCE FOR HUMAN HEALTH
Title of the subject	Food preservation
Degree Course (class)	Nutrition Science for Human Health
ECTS credits	3
Compulsory attendance	No
Language	Italian

Subject Teacher		
Name and Surname	Giuseppe Gambacorta	
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Place and time of reception	Campus in Via E. Orabona, 4 – DiSSPA Agricultural Plexus; Food Technology Section, floor 1 From Monday to Friday 10.00-13.00 by appointment fixed by e-mail	
ECTS credits details	Discipline sector (SSD)	Area
	Food Science and Technology (AGR/15)	Characterizing

Study plan schedule	Year of study plan		Semester	
	first		first	
Time management	Lessons	Laboratory	Exercises	Total
CFU	3			3
Total hours	24			24
In-class study hours				
Out-of-class study hours	51			75

Syllabus	
Prerequisites / Requirements	Basic knowledge of Physics, General and Organic Chemistry
Expected learning outcomes (according to Dublin descriptors)	
Knowledge and understanding	- The main physical, chemical and microbiological methods for food preservation.
Applying knowledge	- Know how to identify the best preservation techniques to preserve or improve the quality, also nutritional, of a food.
Making informed judgments and choices	- The influence of the preservation technique of a food on the quality, also nutritional, of the same.
Communicating knowledge	- Ability to describe the biochemical role of nutrients - Use of an appropriate terminology.
Capacities to continue learning	- Deepening and updating the knowledge of preserving techniques and reference standards.
Study Program	
Content	- Preservation of fresh food products - Preservation using chemicals and microbiological tools - Preservation by controlling water, structure, and modified atmosphere - Preservation using heat and energy

	- Enhancing food preservation by indirect approach
Bibliography and textbooks	<ul style="list-style-type: none"> - Notes of the lectures distributed during the course (all the support materials are available online by means of the Edmodo educational network). - M. Shafiur Rahman. Handbook of Food Preservation. Second Edition. Taylor & Francis Group (2007).
Notes to textbooks	
Teaching methods	The lectures will be presented through Power Point presentations and project works. On-line platforms such as Edmodo, Google drive, mailing list of students will be also used to provide didactic materials and to interact with the students.
Assessment methods	Written exam
Evaluation criteria	<ul style="list-style-type: none"> - Knowledge and understanding Knowledge and understanding of the effect of food preservation techniques on the quality, also nutritional, of the food - Applying knowledge and understanding Describe the strategies needed for the set-up of the technological process of the main preserved foods - Communicating knowledge and understanding Describe the technological processes and the process parameters to produce the main preserved foods. - Communication skills Ability to communicate the technological motivations that are at the basis of nutritional differences between different foods of the same category. - Capacities to continue learning Ability to deepen and update their knowledge of conservation techniques aimed at maintaining the nutritional quality of food.
Further information	