General information	
Academic subject	**Sensory Analysis and Consumer Science (I.C. Food Technologies, Sensory Analysis and Packaging)**
Degree course	*Food Science and Technology (L26)*
Academic Year	*First*
European Credit Transfer and Accumulation System (ECTS)	3 ECTS
Language	*Italian*
Academic calendar (starting and ending date)	*February 27th, 2023 – June 16th, 2023*
Attendance	*No Compulsory*

Professor/ Lecturer	
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Department and address	*DiSSPA*
Virtual headquarters	*Microsoft Teams*
Tutoring (time and day)	Monday-Friday 9.00-16.00

Syllabus	
Learning Objectives	*The course aims to provide knowledge about the physiology of the senses, the main discriminant, descriptive and hedonistic sensory tests, and instrumental methods such as gas chromatography-olfactometry, electronic nose and electronic tongue in order to acquire skills for the correct sensory evaluation of food products.*
Course prerequisites	
Contents	**Introductory concepts and setting up a panel of judges** *Purposes and applications of sensory analysis. Factors influencing the sensory evaluation of food. Recruitment, selection, and training of judges.* **Main sensory analysis tests** *Qualitative discriminant tests: pairwise comparison, triangular, duo-trio, two out of five. Sorting tests and measurement scales. Descriptive tests: flavour profile method (FPM) and quantitative descriptive analysis (QDA).* **Application of sensory analysis to food** *Some applications of descriptive analysis: case studies. Sensory analysis of the main food products. Statistical processing of results and graphic representation.* **Instrumental techniques of sensory analysis** *Olfactometric techniques, electronic nose, and electronic tongue.* **Consumer science tests** *Different tests used in consumer science and evaluation in comparative terms of their merits and demerits and how to apply them.*
Books and bibliography	*Pagliarini E. – Valutazione sensoriale: aspetti teorici, pratici e metodologici. Seconda Edizione. Hoepli editore, Milano, 2021.* *Cabras P., Tuberoso C.I.G. "Analisi dei prodotti alimentari". Piccin Nuova Libreria S.p.A. Editore, Padova, 2014.* *Porretta S. – Analisi sensoriale & consumer science. Chiriotti editori, Pinerolo, 2000.*
Additional materials	*Notes, slides and other bibliographic materials will be furnished during the course*

Work schedule	

Total	Lectures	Hands on (Laboratory, working groups)	Out-of-class study hours/Self-study hours
Hours			
75	*16*	*14*	*45*
ECTS			
3	*2*	*1*	
Teaching strategy		*Course topics will be covered with the aid of Power Point presentations. The exercises will consist of evaluations of basic taste perception thresholds and sensory analysis and consumer tests on food products to be carried out in the classroom. Lecture notes and educational supplies will be provided by means of online platforms.*	
Expected learning outcomes		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)	
Knowledge and understanding on:		o Knowledge and understanding of the sensory physiology and sensory analysis methods. o Knowledge and understanding of the consumer science techniques.	
Applying knowledge and understanding on:		o Ability to identify and apply with autonomy the sensory analysis methods in function of the set goals. o Ability to identify and apply preference tests in consumer science.	

Soft skills		• *Making informed judgments and choices*
		  o Ability to interpret the results of sensory analysis and consumer science aimed to assessment the quality of foods and the preferences of consumers.
		• *Communicating knowledge and understanding*
		  o o Ability to communicate the importance of food quality from a sensory point of view.
		  o o Ability to use the technical language of consumer science.
		• *Capacities to continue learning*
		  o Ability to update and deepen the knowledge of sensory analysis and consumer science methods through the study of scientific publications in the field of food science and technology.	

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).

Assessment and feedback	
Methods of assessment	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's degree in food science and Technology. The foreign student's profit test can be done in English in the way described above.

Evaluation criteria	• *Knowledge and understanding*
	  o Describe the physiology of the senses, the procedure for the creation of a sensory panel and the discriminating and descriptive sensory analysis methods
	  o Describe the methods of consumer science for the assessment of consumer preferences.
	• *Applying knowledge and understanding*
	  o Describe the most appropriate sensory analysis tests and consumer science to apply to foods in accordance with the predetermined goals.
	• *Autonomy of judgment*
	  o Interpret the results of sensory analysis and consumer science to establish the quality and preference of foods.
	• *Communicating knowledge and understanding*
	  o Illustrate the qualitative characteristics of foods through their sensory descriptors.
	• *Communication skills*
	  o The student will be evaluated considering the use of appropriate technical language.
	• *Capacities to continue learning*
	  o Study and propose new sensory methods for the assessment of quality and preference of foods through efficient bibliographic research using the database Scopus and Google Scholar.

Criteria for assessment and attribution of the final mark	The evaluation criteria that contribute to the attribution of the final mark will be: knowledge and understanding, the ability to apply knowledge, autonomy of judgment, i.e. the ability to criticize and formulate judgments, communication skills
Additional information	