COURSE OF STUDY *Master degree: Food Science and Technology (LM70)*
ACADEMIC YEAR *2024-2025*
ACADEMIC SUBJECT *Sensory Analysis and Consumer Science*

General information	
Year of the course	*I year*
Academic calendar (starting and ending date)	*II semester (3 March 2025 - 13 June 2025)*
Credits (CFU/ETCS):	*3*
SSD	*Food Science and Technology - F01-AGR/15*
Language	*Italian*
Mode of attendance	*No Compulsory*

Professor/ Lecturer	
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Department and address	*DISSPA – Campus Via Amendola 165/A Bari*
Virtual room	*Microsoft teams yfqd6v7*
Office Hours (and modalities: e.g., by appointment, on line, etc.)	*Monday-Friday 9.00-16.00 by appointment*

Work schedule			
Hours			
Total	Lectures	Hands-on (laboratory, workshops, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
75	*16*	*14*	*45*
CFU/ETCS			
3	*2*	*1*	

Learning Objectives	Upon completion of the course, students will have a sound 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	

Teaching strategies	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. The program will be conducted using the Inquiry-Based Learning (IBL) methodology, making use of the "5E's learning cycle" (Engage, Explore, Explain, Elaborate, Evaluate) teaching theory.

Expected learning outcomes in terms of	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:	During the course, students will acquire: • Knowledge and understanding of the sensory physiology and sensory analysis methods. • Knowledge and understanding of the consumer science techniques.
Applying knowledge and understanding on:	Students will acquire: • Ability to identify and apply with autonomy the sensory analysis methods in function of the set goals. • Ability to identify and apply preference tests in consumer science.
Soft skills	• *Making informed judgments and choices* 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* Ability to communicate the importance of food quality from a sensory point of view. Ability to use the technical language of consumer science. • *Capacities to continue learning* 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.
Syllabus	
Content knowledge	**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.
Texts and readings	*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.*
Notes, additional materials	Notes and slides help the students to prepare the exam and integrate the information of the suggested book
Repository	All teaching material will be available to students on web platforms (class Teams code *yfqd6v7*).

Assessment	
Assessment methods	The exam consists of an oral dissertation on the topics developed during the theoretical and theoretical-practical lectures in the classroom and in practical activities (laboratory and educational visits). Students 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 one academic year (Art. 4 of the Didactic Regulations of the Master's Degree Course in Food Science and Technology). The result of the mid-term exam is communicated by publication in the student's electronic register and contributes to the assessment of the profit examination by means of calculation of the weighted average. The exam for foreign students may be conducted in English as described above.
Assessment criteria	• *Knowledge and understanding* ○ Describe the physiology of the senses, the procedure for the creation of a sensory panel and the discriminating and descriptive sensory analysis methods ○ Describe the methods of consumer science for the assessment of consumer preferences. • *Applying knowledge and understanding* ○ Describe the most appropriate sensory analysis tests and consumer science to apply to foods in accordance with the predetermined goals. • *Autonomy of judgment* ○ Interpret the results of sensory analysis and consumer science to establish the quality and preference of foods. • *Communicating knowledge and understanding* ○ Illustrate the qualitative characteristics of foods through their sensory descriptors. • *Communication skills* ○ The student will be evaluated considering the use of appropriate technical language. • *Capacities to continue learning* 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.
Final exam and grading criteria	The assessment of the student's preparation is based on predetermined criteria in accordance with the Didactic Regulations of the Master's Degree Course in Food Science and Technology (art. 4). The Examination Committee has a score ranging from a minimum of 18 to a maximum of 30 points for a positive assessment of the student's performance. By unanimous vote of its members, the Board may award honours in cases where the final mark is 30.
Further information	