Freie Universität Bozen
Libera Università di Bolzano
Università Liedia de Bulsan

Syllabus
Course description

Course title	**Sensory analysis and tasting techniques**
Course code	**40416**
Scientific sector	AGRI-07/A (ex AGR/15) Food Science and Technology
Degree	Bachelor in Enogastronomy in Mountain Areas
Semester	I
Year	2024-2025
Academic year	3
Credits	6
Modular	NO

Total lecturing hours	36 hours (Prof. Boselli)
Total lab hours	24 (Dr. Longo 12 hours, Dr. Grosso 12 hours)
Total exercise hours	
Attendance	Not compulsory
Prerequisites	Basic knowledge of chemistry and mathematics
Course page	https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/bachelor-enogastronomy-mountain-areas/course-offering/

Specific educational objectives	• *the scientific area: area caratterizzante* *The course gives a general overview of scientific contents and is designed for acquiring professional skills and knowledge on sensory analysis and tasting techniques* Knowledge and Understanding Students will gain in-depth understanding of sensory perception mechanisms (taste, smell, touch, etc.) and methodologies for conducting sensory analysis and tastings in food and wine contexts. Applying Knowledge and Understanding Students will be able to apply sensory analysis techniques to assess and classify food and beverages, utilizing scientific tools and methods to evaluate sensory attributes such as flavor, aroma, and texture. Making Judgments Students will develop the ability to independently analyze sensory data, make objective quality assessments, and form reasoned judgments regarding the characteristics and value of enogastronomic products. Communication Students will refine their ability to effectively

	communicate sensory analysis results, employing appropriate technical vocabulary to describe sensory experiences and evaluations to both specialized and general audiences. Learning Skills Students will enhance their capability to engage in continuous learning by acquiring new sensory analysis techniques and staying informed on current trends, innovations, and scientific developments in the field of enogastronomy.

Lecturers	***Emanuele Boselli*** *(theoretical part), +390471017217; office NOI Techpark, A2.3.03b, emanuele.boselli@unibz.it; https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/37607-emanuele-boselli;* ***Edoardo Longo*** *(laboratories I), +390471017691; office NOI Techpark, A2.3.03b, edoardo.longo@unibz.it, https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/35783-edoardo-longo* ***Antonella Luciana Grosso*** *(laboratories II), +393500847664; office NOI Techpark, A2.1.07, AntonellaLuciana.Grosso@unibz.it; https://www.unibz.it/it/faculties/agricultural-environmental-food-sciences/academic-staff/person/45361-antonella-luciana-grosso*
Scientific sector of the lecturers	AGRI-07/A (ex AGR/15) Food Science and Technology
Teaching language	English
Office hours	Before and after the lectures; upon appointment
Teaching assistant ***(if any)***	*To be appointed (Name, office, e-mail, tel., lecturer's page)*
Office hours	
List of topics covered	Introduction to sensory analysis; physiology of sensory perception; sensory attributes in food and wine; chemical and physical basis of sensory perceptions; tasting techniques; sensory compatibility and principles of pairing; sensory evaluation methods; sensory panels and calibration; data analysis in sensory tastings; innovation in sensory science.
Teaching format	Frontal lectures, exercises, labs, projects, seminars by experts, participation in events, fairs, and visits to public institutions or private companies related to the topics of the course.

Learning outcomes	The learning outcomes according to the Dublin Descriptors:

	Knowledge and Understanding Upon completion, students will demonstrate comprehensive knowledge of sensory analysis principles, including the sensory systems (taste, smell, touch) and methods used in the tasting and evaluation of food and wine. Applying Knowledge and Understanding Students will be able to apply sensory analysis methods to real-world contexts, conducting tastings, evaluating the sensory quality of food and beverages, and using industry-standard tools and techniques in enogastronomy. Making Judgments Students will develop the capacity to critically interpret sensory data, make objective quality assessments, and offer well-reasoned judgments regarding the sensory properties of food and drink. They will be able to reflect on cultural, geographic, and production factors that influence sensory experiences. Communication Students will demonstrate the ability to effectively communicate sensory analysis outcomes. This includes the use of specialized terminology to describe sensory qualities and share their evaluations with both experts and non-experts. Learning Skills Students will acquire the skills needed for lifelong learning in the field of sensory analysis and tasting. They will be able to independently seek out new knowledge, follow developments in sensory science, and adapt their skills to new methods and trends in enogastronomy.

Assessment	written exam with review questions (multiple-choice and open-ended questions on theoretical and practical concepts) to test knowledge application skills including a test on the physiology of taste and sensory data analysis.
Assessment language	English
Evaluation criteria and criteria for awarding marks	Grading ranges from 18 to 30, with 30 being the highest and 30 e lode (30 with honors) representing exceptional performance.

Required readings	Keynotes provided by the lecturers
Supplementary readings	Sensory evaluation practices by H. Stone (Elsevier) https://www.sciencedirect.com/book/9780126726909/sensory-evaluation-practices; Sensory Evaluation techniques by Meilgard, Carr, Carr (CRC) https://pharmadevils.com/wp-content/uploads/2024/01/Meilgaard-Carr-Civille-Sensory-Evaluation-Techniques.pdf; Valutazione sensoriale by Ella

	Pagliarini, (Hoepli editore); Atlante sensoriale dei prodotti alimentari by Società Italiana di Scienze Sensoriali (all and other readings are available at the central unibz library)