

# Syllabus

## *Course Description*

<b>Course Title</b>	Sensory analysis and tasting techniques
<b>Course Code</b>	40416
<b>Course Title Additional</b>	
<b>Scientific-Disciplinary Sector</b>	AGR/15
<b>Language</b>	English
<b>Degree Course</b>	Bachelor in Enogastronomy in Mountain Areas
<b>Other Degree Courses (Loaned)</b>	
<b>Lecturers</b>	<p>Dr. Edoardo Longo,  <a href="mailto:Edoardo.Longo@unibz.it">Edoardo.Longo@unibz.it</a>  <a href="https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/35783">https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/35783</a></p> <p>Prof. Emanuele Boselli,  <a href="mailto:Emanuele.Boselli@unibz.it">Emanuele.Boselli@unibz.it</a>  <a href="https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/37607">https://www.unibz.it/en/faculties/agricultural-environmental-food-sciences/academic-staff/person/37607</a></p>
<b>Teaching Assistant</b>	
<b>Semester</b>	First semester
<b>Course Year/s</b>	3rd
<b>CP</b>	6
<b>Teaching Hours</b>	36
<b>Lab Hours</b>	24
<b>Individual Study Hours</b>	90
<b>Planned Office Hours</b>	18
<b>Contents Summary</b>	<p>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.</p>

<b>Course Topics</b>	<p>The course covers the fundamentals of sensory perception (sight, smell, taste, touch, hearing) and their interactions in food and wine evaluation. Students learn principles of neurogastronomy and cross-modal effects, along with protocols for sensory methods, panel calibration, and data interpretation. Case studies focus on wine profiling, the sensory analysis of virgin olive oils, and applications to other food products. Practical sessions and student presentations highlight the relationship between chemical composition, sensory descriptors, and consumer acceptance. Overview of sensory methodologies applied to specifically selected wines, including round table discussions, triangle test, and RATA, followed by the interpretation and statistical analysis of the resulting data. Critical reading of scientific literature, discussion of innovative approaches, and guest seminars connect theory with professional practice in gastronomy and food sciences.</p>
<b>Keywords</b>	sensory analysis; tasting
<b>Recommended Prerequisites</b>	Basic knowledge of chemistry and mathematics
<b>Propaedeutic Courses</b>	None
<b>Teaching Format</b>	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.
<b>Mandatory Attendance</b>	No
<b>Specific Educational Objectives and Learning Outcomes</b>	<p><b>Knowledge and Understanding</b> 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.</p> <p><b>Applying Knowledge and Understanding</b> 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.</p> <p><b>Making Judgments</b> 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.</p>

	<p>They will be able to reflect on cultural, geographic, and production factors that influence sensory experiences.</p> <p>Communication skills 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.</p> <p>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.</p>
<b>Specific Educational Objectives and Learning Outcomes (additional info.)</b>	
<b>Assessment</b>	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.
<b>Evaluation Criteria</b>	Students are assessed through a written exam (multiple-choice and open questions) testing both theoretical knowledge and practical application of sensory analysis. Evaluation focuses on understanding of perception mechanisms, correct use of methods and terminology, critical interpretation of sensory data, and the ability to connect scientific literature with practical case studies. Final grades (18–30/30, with honors) reflect overall mastery and clarity.
<b>Required Readings</b>	Keynotes provided by the lecturers
<b>Supplementary Readings</b>	<p>Sensory evaluation practices by H. Stone (Elsevier):  <a href="https://www.sciencedirect.com/book/9780126726909/sensory-evaluation-practices">https://www.sciencedirect.com/book/9780126726909/sensory-evaluation-practices</a></p> <p>Sensory Evaluation techniques by Meilgaard, Civille, Carr, Carr (CRC)</p>

	<p>Valutazione sensoriale, by Ella Pagliarini, Hoepli Editore</p> <p>Atlante sensoriale dei prodotti alimentari by Società Italiana di Scienze Sensoriali (all and other readings are available at the central unibz library)</p>
<b>Further Information</b>	
<b>Sustainable Development Goals (SDGs)</b>	<p>Good health and well-being, Quality education, Partnerships for the goals, Industry, innovation and infrastructure, Responsible consumption and production, Decent work and economic growth</p>