

**1. General information****Course:** SENSORY ANALYSIS**Type:** CORE COURSE**Degree:** 383 - UNDERGRADUATE DEGREE PROGRAMME IN FOOD SCIENCE AND TECHNOLOGY**Center:** 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY**Year:** 3**Main language:** Spanish**Use of additional languages:****Web site:****Code:** 58318**ECTS credits:** 6**Academic year:** 2023-24**Group(s):** 22**Duration:** C2**Second language:****English Friendly:** Y**Bilingual:** N

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2. Pre-Requisites

For the correct learning and acquisition of competences in this subject is necessary to have passed: Mathematics (Statistics), Human Physiology, Fundamentals of Food technology, Structure and properties of food components and Food technology (I and II).

3. Justification in the curriculum, relation to other subjects and to the profession

The subject of Sensory Analysis has as principal aim the acquisition of basic knowledge in this academic discipline that realize the analysis of the food by means of the human senses.

The development reached by the food processing industry allows that the consumer believe that the food safety is guaranted as well as its nutritional and commercial value, but it demands constant improvements towards the sensory characteristics of the products that it consumes. The concepts acquired in this matter will allow the technical professionals, that in his labor practice needs to know and to apply the fundamental technologies of the sensory characteristics of the foods, the application of this tool of mandatory use in quality control, in the development of new products and in the market researches.

4. Degree competences achieved in this course**Course competences**

Code	Description
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB03	Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
E05	To know the composition, phyco-chemical properties, nutritional value and sensory properties of foods
E08	To be able to apply the technological advances and the innovation in foods and food processing processes in the food industry and to evaluate their acceptability by consumers
E13	To know the organoleptic properties of foods and be able to apply methodology and techniques of sensory analysis
E18	To acquire knowledge on food legislation and normalization. To counsel legally, scientifically and technocally the food industry and consumers.
E19	To know the fundamentals of quality and traceability systems and be able to perform their deploy, as well as to evaluate and control the food quality
E22	To perform formation of staff in the food sector
G05	To understand and to use the English language, both written and spoken, applied to the area of the Food Science and Technology. (To be able to acquire this ability, a series of actions that will be specified in every module will be performed).
G06	To dominate the Technologies of the Information and the Communication (TIC) to user's level, which allows to work in virtual spaces, Internet, electronic databases, as well as with common software packages (e.g. Microsoft Office).
G07	To possess ability of organization and planning, initiative, entrepreneurship and aptitude to be employed in teamworks. To possess capacity of resolution of specific problems of the professional area and to develop the critical reasoning and decision making.
G09	To develop the motivation for quality, the capacity to adapt to new situations and the creativity.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

The main aim of the subject of Sensory analysis is to provide the acquisition of basic knowledge of this academic discipline that carry out the analysis of food by means of the human senses

The concepts acquired in this matter will allow to the technical professionals, that in their practice need to know and to apply the fundamental technics of the sensory characteristics of the products, the application of this tool compulsory in the quality control, in the development of new products and in the market researches.

It is aimed that the student acquires the concepts and basic principles of the Sensory Analysis and that he can use it to propose and to solve practical cases, as well as to interpret the obtained results.

6. Units / Contents

Unit 1: INTRODUCTION TO SENSORY ANALISIS SENSORIAL

Unit 2: HUMAN SENSES AND SENSORY PERCEPTION

Unit 3: GENERAL METHODOLOGY

Unit 4: SENSORY TEST PREPARATION

Unit 5: SENSORY TEST EXPERIMENTAL DESIGN

Unit 6: SENSORY ASSAYS

Unit 7: DESCRIPTIVE ANALYSIS

Unit 8: CONSUMER TESTS

Unit 9: SELECTION AND TRAINING OF TASTERS

Unit 10: STATISTICAL ANALYSIS OF SENSORY DATA

Unit 11: PRACTICAL CLASES: SENSORY AND COMPUTER LABORATORIES

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures		1.28	32	Y	N	
Class Attendance (practical) [ON-SITE]	Practical or hands-on activities		0.6	15	Y	Y	
Problem solving and/or case studies [ON-SITE]	Problem solving and exercises		0.2	5	Y	Y	
Group tutoring sessions [ON-SITE]	Group tutoring sessions		0.2	5	Y	N	
Writing of reports or projects [OFF-SITE]	Project/Problem Based Learning (PBL)		1	25	Y	N	
Study and Exam Preparation [OFF-SITE]	Self-study		2.6	65	Y	N	
Progress test [ON-SITE]	Assessment tests		0.12	3	Y	N	
Total:			6	150			
			Total credits of in-class work: 2.4		Total class time hours: 60		
			Total credits of out of class work: 3.6		Total hours of out of class work: 90		

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Final test	60.00%	60.00%	The student's evaluation will account for 40% of their final grade and will be associated with the work carried out during the semester: practical activities and individualized reports of the proposed practical cases, evaluating their analysis, critical and reasoned vision of the proposed work. This qualification will also include the evaluation of the activities carried out in a group.
Portfolio assessment	40.00%	40.00%	The final written test will be based on the resolution of practical cases and the reasoned answer to questions related to the subject (60% of the final mark). To do average with the practical activities it is necessary to have a minimum score of 4.5 points in the written exam.
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

Defined in Campus virtual.

Non-continuous evaluation:

Defined in Campus virtual.

Specifications for the resit/retake exam:

None

Specifications for the second resit / retake exam:

None

9. Assignments, course calendar and important dates**Not related to the syllabus/contents**

Hours	hours
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10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
AENOR	Análisis sensorial : recopilación de normas UNE	AENOR		84-8143065-X	1997	
Anzaldúa-Morales, Antonio	La evaluación sensorial de los alimentos en la teoría y la p	Acribia		84-200-0767-6	1994	
Fortin, J.; Desplancke, C.	Guía de selección y entrenamiento de un panel de catadores	Acribia SA			2001	
Ibáñez, F.C. y Barcina, Y.	Análisis sensorial de los alimentos : métodos y aplicaciones	Springer		84-07-00801-X	2000	
Lawless, Harry T.	Sensory evaluation of food	Kluwer Academic/Plenum Publishers		0-842-1572-X	1999	
MEILGAARD, Morten	Sensory evaluation techniques	CRC Press		0-8493-4280-5	1991	
Sancho Valls, J.	Introducción al análisis sensorial de los alimentos	Edicions Universitat		84-8338-052-8	1999	
Stone, Herbert	Sensory evaluation practices	Academic Press		0-12-672690-6	2004	
AENOR	Análisis Sensorial -2ª Edición	AENOR Ediciones		978-84-8143-705-8	2010	