

**COURSE DATA****Data Subject**

Code	36379
Name	Sensoriality
Cycle	Grade
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. year	Period
1212 - Degree in Gastronomic Sciences	Faculty of Pharmacy and Food Sciences	3	First term

Subject-matter

Degree	Subject-matter	Character
1212 - Degree in Gastronomic Sciences	19 - Sensoriality	Obligatory

Coordination

Name	Department
ESCRIVA LOPEZ, CONSUELO	23 - Functional Biology and Physical Anthropology
SOLER QUILES, CARLA MARIA	265 - Prev. Medicine, Public Health, Food Sc., Toxic. and For. Med.

SUMMARY

The subject "Sensoriality" is a compulsory subject of third year of the Degree of Gastronomic Sciences, which is taught in the Faculty of Pharmacy of the University of Valencia. This course has a total of 6 ECTS credits to be taught in the first semester.

With this subject is intended that the student would be able to conduct a tasting of any food. To do this, the basic concepts on fundamental aspects of sensory analysis, such as the physiological mechanisms involved, definitions, among others, and their importance as a quality parameter in food will be given. In addition, the standardized conditions for the tests and the types of tests that exist will be studied, and the adequate conditions depending on the purpose to be achieved, for which the most used sensory tests will be analyzed.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

OUTCOMES

1212 - Degree in Gastronomic Sciences

- Students must have the ability to gather and interpret relevant data (usually in their field of study) to make judgements that take relevant social, scientific or ethical issues into consideration.
- Students must be able to communicate information, ideas, problems and solutions to both expert and lay audiences.
- Students must have developed the learning skills needed to undertake further study with a high degree of autonomy.
- Have knowledge and understanding in the field of gastronomic sciences.
- Learn the fundamentals for using the scientific equipment directly related to professional activity.
- Be able to engage in new fields of gastronomy in general through independent study.
- Be able to work in a team and to organise and plan activities, always taking account of gender perspective.
- Be able to construct an understandable and organised written text.
- Prepare and handle the writings, reports and action procedures best suited to the problems raised, using non-sexist language.
- Be able to take the approaches required to reduce a problem to a manageable level.
- Know the general concepts and theoretical principles of food sensory analysis and understand the basic aspects of sensory perception such as the physiology of the senses and sensory properties of food.
- Acquire skills for the analysis and interpretation of sensory evaluation results and the application of the statistical analysis appropriate to each experimental design.

LEARNING OUTCOMES

- To design the different sensory tests according to the proposed objectives.
- To know the correlation between the different physical and sensorial properties of food.



- Elaborate final reports from the analysis of sensory and instrumental data.

DESCRIPTION OF CONTENTS

1. INTRODUCTION TO SENSORY ANALYSIS

Definition.
Fields of application.
Historical evolution of the discipline.
Related areas.
Sensory and instrumental measurements.

2. HUMAN SENSES AND SENSORY PERCEPTION

The sight, the smell, the taste, the touch and the ear.
Sensory properties.
The taste perception.
The gustatory stimulus.
Sensory perception.
The senses, the stimuli and the sensations.
Sensorial thresholds.
Calculation of individual and collective thresholds.
Best estimated threshold.

3. REGULATION AND STANDARDIZATION

The Tasting Room.
Environmental requirements.
Tasting booths.
Utensils for sensory tests.
Disposable material.
Standardized utensils.

4. METHODOLOGY OF TASTING

Methodology of tasting

5. SENSORY TESTS



General scheme.

Approach of the sensorial test: objective and characteristics of the samples.

Sensory test planning.

Conduct of the test.

Use of reference samples.

More frequent errors in sensory responses.

6. TYPES OF PANELS

The panel of tasters: recruitment, training, validation and maintenance.

Standard Sheets.

Blind tasting.

7. PROCESSING OF RESULTS

Introduction to statistics for sensory analysis.

Hypothesis test.

Binomial test.

Types of tests.

Preparation of reports.

8. FOOD WITH MESSAGE. NEUROGASTRONOMY

Perception of the consumer. Motivation in choice and sensation. Phenomena of adaptation and masking.

Factors that influence the sensory response. Psychophysical laws.

9. MICROORGANISMS

Microorganisms related to sensory characteristics in specific products.



WORKLOAD

ACTIVITY	Hours	% To be attended
Other activities	30,00	100
Theory classes	15,00	100
Laboratory practices	15,00	100
Preparing lectures	45,00	0
Preparation of practical classes and problem	45,00	0
TOTAL	150,00	

TEACHING METHODOLOGY

The **theoretical** teaching methodology will be based on the delivery of lectures along with the possible performance, presentation and defense of individual and collective reports. Classes are taught using audio-visual technical equipment. The student will have this material in the virtual classroom.

The **practice sessions** will be conducted in a laboratory, where students can extend and implement the knowledge. He/She distributed a booklet of practices with the necessary materials and the development of each of the perfectly organized practices. The teacher will monitor the practice, will address the doubts in the implementation and provide guidance on how to make reports, organizing results and conclusions. At the end of the internship, the teacher will distribute a series of questions that students will develop and deliver to the teacher within a certain time. In classroom practical classes problem and cases will be resolved.

Seminars will be used to enhance teamwork and improve oral presentation, by performing theoretical and practical training to complement that is acquired in class work, and also for another series of complementary activities types varied.

Visits will be scheduled to centers of interest for the subject. The objective will be to show in situ the day-to-day operation and installations of a company to apply theoretical knowledge. Attendance is mandatory and essential to be able to take the theoretical/practical exam of the subject. At the end of the visits, a report will be delivered to the teacher.

During the activities, examples of the applications of the contents of the subject in relation to the Sustainable Development Goals (SDGs) will be indicated, and topics will be proposed for the seminars. This is intended to provide to the student knowledge, skills and motivation to understand and address these SDGs, while promoting reflection and criticism.

EVALUATION

Written test to ensure knowledge and understanding of established theoretical minimum content for the subject (60%). The written test will include questions about theoretical sessions and classroom practical classes.

Seminars will be evaluated with the possible implementation, presentation and defense of individual and group reports on topics related to the contents explained and discussed in the classroom during the



theoretical classes, classroom practical classes, seminars or visits. The level of understanding of content and skills to their exposure, advocacy and discussion will be appreciated (10%)

Assessment of **practice sessions** work by monitoring the work of the same, the ability to solve experimental problems and the ability to make very detailed and organized reports of experimental results. (20%)

Continuous assessment will consist of assessing the work done during the practical classes, the classroom and the visits, and the ability to solve the proposed activities (10%).

It is necessary to acquire 5 out of 10 points in the written test that includes questions of theory and practice to pass the subject.

Attendance at practices, visits and seminars is mandatory to pass the subject. It is not obligatory for repeaters during the two subsequent courses to its realization.

Evidence of copying or plagiarism in any of the assessable tasks will result in failure to pass the subject and in appropriate disciplinary action being taken. Please note that, in accordance with article 13. d) of the Statute of the University Student (RD 1791/2010, of 30 December), it is the duty of students to refrain from using or participating in dishonest means in assessment tests, assignments or university official documents.

In the event of fraudulent practices, the "Action Protocol for fraudulent practices at the University of Valencia" will be applied (ACGUV 123/2020): <https://www.uv.es/sgeneral/Protocols/C83sp.pdf>

REFERENCES

Basic

- F.C. Ibáñez y Y Barcina, 2001, Análisis sensorial de alimentos: métodos y aplicaciones, Springer-Verlag
- G.A. Cordero-Bueso (Coordinador) 2017 Análisis sensorial de los alimentos. Antonio Madrid Vicente, Editor.
- AENOR (Asociación Española de Normalización y Certificación), Análisis sensorial, 2010,
- J. Briz Escribano, R. Garcia Faure, 2002, Análisis Sensorial de Productos Alimentarios. MINISTERIO DE AGRICULTURA, PESCA Y ALIMENTACIÓN