

Course Unit	Sensory Analysis	Field of study	Food Industries
Bachelor in	Oenology	School	School of Agriculture
Academic Year	2023/2024	Year of study	2
Type	Semestral	Semester	2
Workload (hours)	81	Contact hours	T - , TP 30, PL - , TC - , S - , E - , OT 2, O -
		Level	1-2
		Code	9998-705-2201-00-23
		ECTS credits	3.0

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Marieta Amélia Martins Carvalho, Sandra Sofia Quintero Rodrigues

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Understand the importance of sensory evaluation of wine. Advantages and disadvantages of sensory analysis.
2. To know and advantages and disadvantages of sensory analysis. Physiology of the senses: vision, smell and taste.
3. To know and to identify the basic flavors, the thresholds of perception and the compounds of the wine associated to those flavors.
4. Select and train a panel test. Learn how to apply the methods of sensory analysis of wine. Relate to sensory and instrumental analysis with the statistical methodology.
5. Relationship of the sensory analysis, with components of the organoleptic quality - appearance, odor, In-mouth Sensations. Apply the methods learned.

### Prerequisites

Before the course unit the learner is expected to be able to:  
Knowledge of statistical methods.

### Course contents

1-Introduction to sensoryanalysis 2 - Basics of sSensory analysis 3 - Objectives of the sensory analysis 4 - The most common attributes: - Appearance: clarity, color, viscosity, spritz, tears. - Odor: orthonasal (in-glass) odor - In-mouth Sensations: Taste and mMouth-feel, odor-retronasal 5 - Rooms for samples preparation and panel training 6 - Types of tests 7 - Factors influencing the performance 8 - Samples presentation 9 - The report, in sensory analysis

### Course contents (extended version)

1. Introduction to sensory analysis
2. Quality definition:
  - safety, functional, organoleptic, nutritional, cultural and ecologic properties
3. Importance of sensory control, SC. Acceptability by the consumer. Advantages and disadvantages of SA
4. Bases of sensory analysis
  - Defining the problem
  - Subjectivity. Physiological and psychological factors
  - Physiological basis
  - Basic tastes: sweet, salty, bitter, sour
  - the taster
  - Area for the tests and sample preparation
  - The room. Environmental aspects
5. Objectives of the sensory analysis
  - Objective characterization and acceptability. New Products
  - anel Types: consumer, industrial, analytical, chamber of judges
  - Selection and training of assessors. Management Panel. Training of a panel. Behavior of judges
  - Presentation of the samples. The panel manager
  - Sensory analysis in the industry. Sensory analysis on consumption
6. The most common attributes. Scales
  - Appearance: clarity, color, viscosity, spritz and tears.
  - Odor: Orthonasal (in-glass) odor
  - In-mouth Sensations: Taste and Mouth-feel, odor-retronasal
7. Final assessment
8. Types of sensory tests
  - "Affective" tests
  - discriminative tests
  - Descriptive tests

### Recommended reading

1. Félix Depledt (coordonateur), 2009. Evaluation sensorielle manuel méthodologique. Collection : Sciences & techniques agroalimentaires. Éditeur : Tec et Doc, Paris
2. Peynaud, E. ; Blouin, J. 2005. O gosto do vinho. Litexa Editora
3. Jackson, R. S. 2009. Wine tasting-AProfessional Handbook. 2nd Edition. Academic Press. London
4. Normas ISO 8586, ISO 3591, ISO 8589, ISO 3972, ISO 4121, ISO 6658, ISO 549, ISO 13300-1, ISO 13300-2, ISO 11300
5. NP EN ISO/IEC 17025: 2018 - Accreditation for Sensory Testing Laboratories

### Teaching and learning methods

Lectures will be supported by media and multimedia resources. Practical classes will engage work in lab. Seminars will allow teacher and students to explore a particular topic related to food quality. Non present hours will involve training in a working environment. Graduate students are expected to work largely on their own initiative although with the close support and supervision of a tutor.

### Assessment methods

1. Continuous assessment: - (Regular, Student Worker) (Final)
  - Practical Work - 50% (Practical Work (50%; 1, 5 ECTS). The note must be >9, 5 points.)
  - Final Written Exam - 50% (A test theoretical and practical (50%; 1, 5 ECTS). The note must be > 9, 5 points.)
2. Evaluation of student workers: - (Student Worker) (Final, Supplementary, Special)
  - Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 3, 0 ECTS).)
3. Resource evaluation: - (Regular, Student Worker) (Supplementary)

**Assessment methods**

- Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 3, 0 ECTS).)
- 4. Special - (Regular, Student Worker) (Special)
- Final Written Exam - 100% (Global written exam: theoretically and practical (100%; 3, 0 ECTS).)

**Language of instruction**

Portuguese, with additional English support for foreign students.

**Electronic validation**

Marieta Amélia Martins Carvalho, Sandra Sofia Quinteiro Rodrigues	Fernando Jorge Ruivo Sousa	António Castro Ribeiro	Ramiro Corujeira Valentim
17-01-2024	18-01-2024	27-01-2024	29-01-2024