

Course:	L025 - Food Quality and Nutrition
Degree:	Bachelor
Curriculum Unit:	9087006 - Food Sensorial Analysis
Scientific field:	Food Science and Technology
ECTS^(*):	4
Curriculum year:	3rd
Curriculum semester:	1st
Frequency Regime:	Mandatory
Teacher(s):	Ana Cristina Vilas Boas Correia
Contact hours ^(**):	TP - 60
Total work time (hours):	132

(*) - ECTS - European Credit Transfer and Accumulation System

(**) – T- Theoretical; TP- Theoretical/Practical; LP- Lab Practice; S- Seminars; I- Internships; TU - Tutorials; O- Other (Evaluations)

Objectives / Competences

Prepare the experimental outline of sensory evidence. Correctly use a tasting room. Prepare the samples for sensory evaluation. To learn how to select and train the assessors to participate in an analytical panel. To analyze statistically the results obtained in the main tests used in sensory analysis of foods: discriminative, descriptive and emotional analytical tests. Develop the skills required to perform well as a taster. To know the specificities of the sensory analysis concerning some products.

Syllabus

Theoretical: Introduction to the sensory analysis. Importance of sensory quality in the food industry. Recurring analytical methodologies. Physiological principles of the senses. Relationship between the senses and feeding habits. Vocabulary used in sensory analysis. Conditions of sensory tests. Panels. Selection and training of professional tasters. Type of sensory evidence. Evaluation of results with the help of appropriate statistical methods. Statistical analysis: univariate and multivariate analysis. Practical component: Selection and training of a panel of tasters Acuity and ability to distinguish primary flavors of solutions at different concentrations. Ranking or sorting test Detection and recognition of odors. Differential and descriptive discriminatory trials to assess the quality of food products.

Teaching methodologies and evaluation criteria

This curricular unit will be taught in e-learning system mixed with classroom and online support. The classes include classroom lectures and laboratory practice. The theoretical instruction is based on the exposure of the material in lectures. The practical component will be carried through in analogous situations the practical cases of sensorial food evaluation.

The evaluation consists of a written exam final, encompassing the acquired knowledge in both theoretical and theoretical-practical and written work done in group and stating the work in practical laboratory component.

Short bibliography

ACTIA (1999), Évaluation Sensorielle- Guide de Bonnes Pratiques (D. Majou, coordenador).

ANGEROSA, F. (2000), Sensory quality of olive oils, In: Handbook of Olive Oil- Analysis and Properties, (J. Harwood, R. Aparício, eds.), Aspen Publishers Inc., Gaithersburg, Maryland, pp. 355- 392.

Fortin, J., Desplancke, C. (1998) Guide d'entraînement d'un jury de dégustation. La Fondation des Gouverneurs e Edisem, Canada.

LAWLESS, H.T, KLEIN, B.P. (1991), Sensory Science. Theory and Applications in Foods, IFT Basic Symposium Series, Marcel Dekker, Inc., New.

MEILGAARD M.; CIVILLE C.V. & B.T. Carr - Sensory evaluation techniques. 3rd Edition, CRC Press Inc., Florida, 1993, 281 pp.

PIGGOTT J.R.- Sensory Analysis of Foods, Elsevier, 1984.

STARLING E. & C.L. Evans - Princípios de fisiologia humana. II Volume. Fundação Calouste Gulbenkian, Lisboa. 1978.

STONE H. & J. Sidel - Sensory evaluation. Academic Press Inc., London. 1985.