

Course:	L025 - Food Quality and Nutrition
Degree:	Bachelor
Curriculum Unit:	9000023 - Food Innovation, Development and Valuation
Scientific field:	Food Science and Technology
ECTS^(*):	5
Curriculum year:	2nd
Curriculum semester:	2nd
Frequency Regime:	Mandatory
Teacher(s):	Raquel de Pinho Ferreira Guiné
Contact hours ^(**):	T - 30; TP - 30
Total work time (hours):	138

(*) - 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

With the skills provided in this course it is intended that the student may be able to meet the guiding principles for the development of new food products.

After the course the student will have the following skills:

- Identify needs and potential for development in terms of food markets;
- Identify the conditions necessary for the development of a new food product;
- Do market research geared to launch new products in the food market.

Syllabus

PART I - UTILIZATION OF BY-PRODUCTS AND WASTE OF FOOD INDUSTRIES

- 1 - Use of by-products
- 2 - By-products of meat industry
- 3 - By-products of wine making
- 4 - By-products of fishing
- 5 - By-products of dairy industry
- 6 - Byproducts of horticultural processing

PART II - DEVELOPMENT OF NEW FOOD

- 1 - Key factors for the success or failure of new food products
- 2 - Strategies for development and innovation
- 3 - The process of product development
- 4 - The bases of knowledge for product development
- 5 - Importance of the consumer in the development process

Teaching methodologies and evaluation criteria

In the theoretical lectures will be presented the basic concepts that support the activities of practical classes where will be provided support to the development of a new food product.

New technologies are used in the class, powerpoints / datashow, and contact with students is privileged by "elearning" through Moodle.

Students conduct group work under a common theme, targeting the launch of a new food product in the market.

The work involves the following aspects:

Research in the literature about the subject,

Idea of new product

Placement of the new product on the market.

The evaluation consists of two components: developing group work with presentation, which counts 50% to the final grade, and an examination, which also counts 50% to the final grade.

Short bibliography

- Earle M, Earle R, Anderson A (2001) Food product development. Woodhead Publishing Ltd., Cambridge, England.
- Earle M, Earle R. (Eds) (2001) Case studies in food product development. Woodhead Publishing Ltd., Cambridge, England.
- Macfie H, Hal MacFie (Eds) (2007) Consumer-led food product development. Woodhead Publishing Ltd., Cambridge, England.
- Madrid A (1999) El pescado y sus productos derivados. Mundi-Prensa Ediciones.
- Madrid A (1999) Aprovechamiento de los subproductos cárnicos. Mundi-Prensa Ediciones.