

30812 - Bromatology

Syllabus Information

Academic year: 2023/24
Subject: 30812 - Bromatology
Faculty / School: 105 - Facultad de Veterinaria
Degree: 568 - Degree in Food Science and Technology
ECTS: 6.0
Year: 2
Semester: First semester
Subject type: Compulsory
Module:

1. General information

The objective of this subject is to provide students with knowledge of foods of animal, vegetable and fungal origin: concept, consumption, classification, identification, characteristics, alterations, chemical composition, nutritional value and functional properties, as well as the quality standards of each food for its correct commercialization.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), such that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement:

- Goal 3: Health and wellness.
- Goal 12: Responsible Production and Consumption

2. Learning results

- Is able to understand and apply the fundamentals of bromatology to foods of animal, plant and fungal origin.
- Is able to define, classify and properly identify foods of different origins.
- Is able to differentiate the organoleptic modifications of foods produced by different alteration factors
- Is able to describe the chemical composition of foods and relate this knowledge to the nutritional value and functional properties of foods
- Is capable of interpreting and applying the quality standards of each food for its correct commercialization.
- Is able to carry out a team work on the bromatological study of a given food as a basis for a subsequent integrated project in the subjects of Physical and Sensory Analysis of Food, Chemical Analysis of Food and Microbiological Analysis of Food, which are taught in the second quarter of the second year.

3. Syllabus

Block I. General principles: Topics 1-5 (Bromatology; Food and nutrients; Organoleptic characteristics of food; Food consumption in Spain; Mandatory quality standardization).

Block II. Descriptive bromatology: foods of animal origin. Topics 6-13 (Meat; Meat derivatives; Milk; Dairy products; Fish; Molluscs and crustaceans; Eggs and egg products; Honey).

Block III. Descriptive bromatology: foods of plant and fungal origin. Topics 14-22 (Fruit and vegetable products; Dried vegetables; Cereals and derivatives; Confectionery, bakery products; Food seasonings; Sweeteners; Stimulants; Edible fats and oils; Edible mushrooms).

Block IV. Descriptive bromatology: other foods. Topics 23-25 (Organic Foods; Genetically Modified Foods; Functional Foods).

4. Academic activities

Master classes: 37 hours

Theoretical sessions in which the contents of the subject are explained

Problem solving and case studies: 3 hours

Sessions to solve practical cases presented by the teachers.

Laboratory practices: 20 hours

Teaching assignments: 27 hours

Elaboration of tutored work on the bromatological study of a food assigned by the teachers

Personal study: 60 hours

Assessment tests. 3 hours

5. Assessment system

The subject will be assessed by the continuous assessment system by means of the following activities:

Test 1. Midterm and final written test of the theoretical sessions (75% of the grade). It will consist of short and multiple choice questions of simple answer. First midterm exam (blocks I and II), eliminatory with a minimum of 5 out of 10, keeping the grade in the two calls of the subject. Those who have passed the first midterm exam may only take the second midterm exam in both calls (blocks III and IV), with the same conditions to pass it as the first one. Students who do not have passed the first midterm exam will take a single final exam (blocks I-IV) (minimum 5 out of 10).

Test 2. Written test of the practical sessions (10% of the grade) The learning results of the practical sessions will be considered acquired with the attendance, active participation and delivery of a practical report. Students who have not taken or who have missed any of them, without justified cause, must take a written test of short questions on practical teaching on the day of the final written test (minimum 5 out of 10). The grade will be maintained for 2 academic years.

Test 3. Supervised work (15% of the grade, minimum 5 out of 10). Form of presentation: written paper. The grade will be maintained for 2 academic years.

The assessment criteria for short questions are clarity and conciseness in the answers, and for multiple-choice questions, incorrect answers will subtract one third of the value of the question. For tutored work, the ability to obtain, sort and synthesize information about the food will be taken into account.

Students who have not submitted the tutored work as a group or who waive the grade obtained will have to submit it individually, following the same criteria already mentioned for Test 3 . They will contact the teachers to agree on the topic of the work to be developed.