

68769 - New tools in food safety

Syllabus Information

Academic year: 2024/25

Subject: 68769 - New tools in food safety

Faculty / School: 105 - Facultad de Veterinaria

Degree: 631 - Master's Degree in Food Quality, Safety and Technology

ECTS: 3.0

Year: 1

Semester: Second semester

Subject type: Optional

Module:

1. General information

This elective subject belongs to the specialization itinerary module of the Master's Degree in Food Quality, Safety and Technology and is eminently practical in nature. Its main objective is to teach the student to integrate new concepts within the food safety program and the self-control program in the food industry, through the use of support tools for decision making in a food market that is in continuous transformation.

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 the achievement of targets 3.3 and 3.9 of Goal 3, target 6.3 of Goal 6, target 9.4 of Goal 9, and target 12.5 of Goal 12.

It is recommended that the student has a basic knowledge of food microbiology, toxicology and hygiene and the basic food safety management system based on HACCP.

2. Learning results

1. To know food safety management tools and how to apply them.
2. To develop a scientific assessment applicable to the use of food safety targets.
3. To create guidelines for food crisis control
4. To implement a traceability system in the food chain
5. To undertake shelf-life studies aimed at food safety assurance

3. Syllabus

Topic 1. Food safety management systems: progress and challenges.

Topic 2. Food Safety Objectives (FSO) and performance criteria.

Topic 3. HACCP system validation tools.

Topic 4. HACCP system verification tools.

Topic 5. Integration of shelf life into the food safety management system.

Topic 6. Food fraud management: vulnerability assessment and critical control point (VACCP) system.

Topic 7. Food Defence: Threat Assessment and Critical Control Point (TACCP) system.

Topic 8. Food safety in food donation and utilization.

Topic 9. Food alert management and communication tools.

4. Academic activities

Master class. 16 hours. Presentation of advances in strategies to ensure food safety and orientation of databases and information sources for the development of models applied to the food sector.

Problems and cases. 14 hours. Analysis and solving of cases related to the application of the tools covered in the subject including debate and guided discussion in the classroom. Preparation of teaching assignments supervised by the teacher. Presentation and discussion of the group work.

Teaching assignments. Individual/group work (validation of food control measures) and individual practice report (solving practical cases).

Personal study. 43.5 hours

Assessment tests: 1.5 hours.

Individual and/or group tutoring. Face-to-face or virtual doubt solving.

5. Assessment system

CONTINUOUS ASSESSMENT (during the teaching period)

In order to be eligible for this evaluation system, attendance to 80% of the scheduled academic activities is mandatory.

In order to pass the subject, it is necessary to obtain a minimum grade of 5/10 points in each of the assessment tests. The grades obtained in the tests passed will be kept during the same academic year.

a) Individual case study report (40% of the final grade)

Written presentation of the report of two case studies based on the application of the knowledge acquired. Assessment criteria: ability to apply knowledge to practice, use of information sources, clarity and written expression, interpretation and critical capacity of the conclusions obtained.

b) Preparation, presentation and oral discussion of the group work (60% of the final grade).

The work will be based on the validation through scientific literature of a food control model applied to real scenarios as a basis for decision making in the food safety management system. The test will consist of the preparation and delivery of the work including slides, oral presentation and discussion with the class as a whole. . Assessment criteria: ability to analyse and summarise, clarity of exposition, scientific rigour, critical and self-critical ability, active participation of the student in the tutorial process during the production of the work.

Note: students who have not passed the assessment tests or wish to improve the grade obtained in the continuous assessment, will take a written global final exam, consisting of the corrections and discussion of the practical cases and the work that the student has done in group.

FINAL COMPREHENSIVE TEST (ordinary and extraordinary calls)

In order to pass the subject it is necessary to obtain a minimum grade of 5/10 points in each of the assessment tests. The grades obtained in the tests passed will be kept during the same academic year.

a) Individual report of practical cases(40% of the final grade)

It will consist of the same test indicated in the continuous assessment system.

b) Preparation, presentation and oral discussion of the work done individually (60% of the final grade).

It will consist of the same test indicated in the continuous assessment system. The preparation of the work will be individual including oral presentation and discussion with the teachers of the subject.

6. Sustainable Development Goals

3 - Good Health & Well-Being
6 - Clean Water and Sanitation
12 - Responsible Production and Consumption