Universidad Zaragoza

Academic Year/course: 2024/25

68768 - Methodology for evaluation of food risks

Syllabus Information

Academic year: 2024/25
Subject: 68768 - Methodology for evaluation of food risks
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. The objective to provide the student with a systematic and rigorous knowledge of the procedure of chemical and biological food risk assessment. They will also learn to interpret the information and communicate the conclusions of the scientific works on risk assessment, as well as to apply the acquired knowledge to a research objective in the field of food safety.

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/), so 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 and target 12.5 of Goal 12.

A basic knowledge of food microbiology, toxicology and hygiene and other subjects related to food safety is recommended.

2. Learning results

1. To understand and interpret information from the risk assessment work of food safety agencies.
2. To plan and apply the methodology for risk assessment of biotic and abiotic threats in the diet in real scenarios.
3. To apply the scientific fundamentals and procedures of risk assessment to food safety research models.

3. Syllabus

Topic 1. General principles of food risk analysis. Risk assessment, management and communication.

Topic 2. Methodologies for the assessment of food hazards of chemical origin. Practical application.

Topic 3. Methodologies for the assessment of food hazards of biological origin. Practical application.

4. Academic activities

Master class. 4 hours. Presentation of the theoretical principles of food risk assessment and guidance on how to search for information.

Problems and cases. 26 hours. Study of a biological and chemical food risk assessment model in real situations. Solving of practical cases of food risk assessment raised by the teacher 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 (analysis of a scientific article preferably written in English) and individual report on the practical activities (solving of two case studies).

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 (chemical risk and biological risk) based on the application of the concepts to the food risk assessment process. 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) Drawing up, presentation and oral discussion of the group work(60% of the final grade)**.**

The work will be based on the analysis of a scientific article on a food risk assessment model applied to real scenarios as a basis for decision making in food risk management. 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 one or any of the previous activities or wish to improve the grade obtained in continuous evaluation, they will do a final global test in ordinary call, consisting of the resolution of a practical case (chemical and/or biological risk) and the delivery of the work individually/group after correcting it.

FINAL OVERALL 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 case study report (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
12 - Responsible Production and Consumption