

30822 - General Food Hygiene

Syllabus Information

Academic year: 2024/25

Subject: 30822 - General Food Hygiene

Faculty / School: 105 - Facultad de Veterinaria

Degree: 568 - Degree in Food Science and Technology

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

This subject is included in the "Microbiology and Food Hygiene" module and its general objective is that students learn about the different hazard agents responsible for the loss of food safety and the factors affecting their presentation. This subject also pretends students to acquire knowledge, skills and abilities that allow them to identify the measures to prevent and control food safety hazards through the food chain.

2. Learning results

1. Know the main terms associated with the concept of food hygiene and safety and the fundamentals of food hygiene.
2. Identify hazardous agents of any kind that may be present at any stage of the food chain.
3. Analyse the contributing and triggering factors that determine the presence and survival of hazard agents in food.
4. Know the main morbid syndromes caused by food hazards, to identify their causes and to evaluate their epidemiology in order to propose preventive measures and immediate action for their control.
5. Identify the hygienic requirements to be implemented in food industries and establishments and be able to organize sanitation measures in the food industry.
6. Train food handlers from the hygienic point of view.
7. Establish a correct and effective oral and written communication in Spanish and a more comprehensive reading in English.

3. Syllabus

Block I.- Concept and fundamentals of Food Hygiene.

Concept of food hygiene, food safety and food suitability for consumption.

Global approach to the food chain.

Block II.- Hazards transmitted by or naturally occurring in foods

Introduction to food toxicology

Prevention and control of natural food toxicity.

Characteristics and measures for the prevention and control of food contamination by:

- Food allergens.
- Chemical contaminants of environmental origin.
- Chemical residues from animal health treatments and feed additives
- Chemical waste from pesticide treatments
- Toxics associated with industrial processing and preparation of foodstuffs
- Biological hazards: bacteria, viruses and parasites.
- Mycotoxins and biogenic amines

Block III.- Hygiene in food production and processing

Hygiene in primary production.

General principles of hygiene in food production: design and maintenance of premises, equipment and utensils; cleaning and disinfection in the food industry; pest control; waste disposal; water disinfection; control of operations; personnel hygiene.

4. Academic activities

Master classes (35 h). They will be participatory and the contents detailed in the program will be presented in a reasoned manner.

Practices in computer classroom (14 h):

- Practice 1. Sources of information in the field of food hygiene. Applied computer classroom study of food infections and intoxications: evolution of epidemiological data, knowledge of contamination sources and outbreak propagation system.
- Practices 2, 3, 4 and 5. Applied study focused on the search and interpretation of information related to the characteristics, prevention and control of food contamination by chemical (2 and 3) and biological (4 and 5) hazardous agents.

Laboratory practices (9 h):

- Practice 6. General principles of hygiene in the food industry (I).
- Practice 7. General principles of hygiene in the food industry (II).
- Practice 8. General principles of hygiene in the food industry (III).

Seminars (2 h):

Classroom session to analyze and discuss the results obtained in the tests carried out in the laboratory practices.

Throughout the course, voluntary activities may be proposed to the students: analysis of current news related to the content of the subject; creation of content or dissemination actions related to the subject; etc..

5. Assessment system

To obtain a final grade equal to or higher than 5/10 (pass) it is mandatory to obtain the minimum score required in each of the evaluation tests. Otherwise, the final grade will correspond to the lowest of those obtained.

1: Comprehensive written exam (75%).

- Test I (45%). Individual written test with short and developmental questions to assessment of the knowledge of the characteristics of contamination by hazardous food agents and the measures for their prevention and control. Test I can also be passed during the period of classes and will be considered as eliminatory for those students who pass it with a grade >6/10. The grade obtained in the two exams of the course will be maintained (Part I+II).
- Test II (30%). Individual written test with short, developmental and practical questions to assess the Assessment of knowledge of the General Principles of Hygiene in the food industry (Part III).

2: Practical knowledge test (25%)

It will be carried out by performing the following tests:

- **Test I (50% of the grade of the practical part).** Presentation and discussion of a paper on a hazardous chemical agent. The grade obtained will be the result of:
 - Presentation and discussion of the work done in group (30%) and
 - Completion of an individual questionnaire (20%), scheduled at the end of the practical sessions.

Assessment criteria: ability to search, analyse and process information; ability to communicate and express, ability to relate acquired knowledge.

- **Test II (50% of the grade of the practical part)-** Presentation and discussion of a paper on a biohazardous agent. The grade obtained will be the result of:

- Presentation and discussion of the work done in group (30%) and
- Completion of an individual questionnaire (20%), scheduled at the end of the practical sessions.

In the case of not attending the practices, obtaining an average grade in both tests lower than 5.0, or if the student wishes to waive the grade obtained, the student must take an individual evaluation on this part of the subject coinciding with the overall written exam consisting of an individual written exam in which the student will have to answer a series of questions related to the characterization of a food hazard.

In the case that a final grade higher than 5 is obtained, the grade can be improved through participation in voluntary activities. The grade obtained in these activities can account for up to 10% of the overall course grade and will be averaged with the final grade if it improves the student's overall score, but not otherwise (final grade: 90% from the ordinary evaluation tests + 10% from the voluntary activities, provided the final result improves the grade obtained from the sole evaluation of the ordinary tests). The critical and applicative capacity of the acquired knowledge will be assessed.

6. Sustainable Development Goals

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