

Academic Year/course: 2021/22

30834 - Management of Food Safety

Syllabus Information

Academic Year: 2021/22

Subject: 30834 - Management of Food Safety

Faculty / School: 105 - Facultad de Veterinaria

Degree: 568 - Degree in Food Science and Technology

ECTS: 6.0

Year: 4

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

2. Learning goals

3. Assessment (1st and 2nd call)

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process of the course is based on participatory theoretical exposition activities by the teacher, related on the contents of the subject, practical lessons applied to development of autocontrol models and HACCP to solve problems and cases and a work developed by the students under the supervision of the teacher by an individual or collective tutorial. Regarding planned activities, learning material will be available for the student through individual access to the subject on the digital platform of the University. Students are encouraged to review lectures from the same module in advance. Hence, it is recommended that students complete their lecture notes looking up bibliographic sources and reliable information.

Every working group will be personally supervised by the teacher through scheduled tutorials. The main goal consists of mentoring in the strategies to look up scientific references and be critical to analyse the data.

Tables, graphs and English documents will be used by the students in theoretical and practical activities. Therefore, every student must have a working knowledge of English language.

Regarding the general approach of the work, every group will be specifically mentored by the teachers to encourage the students to increase their work capability, summarize the topics and individual research.

Students must follow the regulations described in:

- Prevention: A guide for students at the University of Zaragoza:
https://uprl.unizar.es/sites/uprl.unizar.es/files/archivos/Procedimientos/guia_preventiva_para_estudiantes.pdf
- Manual de seguridad en los laboratorios de la Universidad de Zaragoza y normas marcadas por la Unidad de Prevención de Riesgos Laborales:

https://uprl.unizar.es/sites/uprl.unizar.es/files/archivos/Procedimientos/manual_de_seguridad_en_los_laboratorios_de_la

<https://uprl.unizar.es/inicio/manual-de-procedimientos>

In addition, students will follow as well any instructions related to biosecurity given by the professor

4.2. Learning tasks

The learning activities scheduled include 39 hours of participatory lectures, 21 hours of practical activities with the development of a work supervised by the teacher through scheduled tutorials referred in the timetable Centre.

The lectures that will take place in the classroom will be participative. In these sessions, the theoretical contents listed in the program will be set out and discussed in detail.

The practical session will be held in seven sessions of 3 hours each and will focus on a specific issues chosen from the subject program. The first three sessions will be focused on setting out the principles of Hazard Analysis and Critical Control Point (HACCP) management system in a practical way in different food processes. The first session (Hazard analysis) will consist of identifying specific hazards, in the following session the Critical Control Points will be identified and will be managed in the following session. Verification and validation procedures will be established to confirm that the HACCP system is working correctly. Fourth session will be related to traceability and will be integrated within the HACCP system in one session. Shelf-life determination in each process will be developed in the fifth session. Sixth session will be related to a practical application of a food safety audit. In the seventh session all the students will do a powerpoint presentation of the management model in the last session and they also be encouraged to discuss all the aspects related to the HACCP system. Practical session may include visits to centres, institutions, laboratories and food industries to know 'in-situ' practical applications with their acquired knowledge.

Apart from group tutorials, every student will have two hours per week of tutorials, in order to solve individual or group doubts with the teachers during the academic course. Furthermore, the web platform for virtual mentoring may also be used.

4.3. Syllabus

The course will address the following topics:

1. Introduction of the Food Safety Management. Concepts. Food Safety Management systems. White Paper of Food Safety. European Policy of Food Safety. Aspects to take into account in the Food Safety Management. Food integrity.
2. Autocontrol tools based on the HACCP. Autocontrol in the Food industry and the application in the Food Safety Management. Hazard Analysis and Critical Control Points as a basic tool in Food Safety Management applied in the Food Industry. Prerequisite programs of the HACCP
3. HACCP plan. Definitions and principles. Guiding principles to develop the HACCP plan.
4. Traceability as an essential tool to guarantee food safety. Traceability concept, components, elements and types of traceability. Traceability plan. Applied traceability in agrofood sectors.
5. Crisis management and food alerts. Withdrawal plan. Communication plan. Food alert management system. System performance of the network alert system.
6. Food safety by the labelling and shelf-life. Basis, calculation system and development.
7. Audits of Food Safety Management Systems. Concepts, principles, and types of audits. Audit planning.
8. Volunteer management systems of Food Safety. Regulations, national and international standards about food safety. ISO 22.000 standard.
9. Application of the risk analysis in the Food Safety Management. Risk assessment. Risk Management. Risk Communication. Principle of caution
10. Food Safety Objectives. Food Safety Goals. Management parameters based on the the hazards. Management parameters based on the risks. Practical application in the Food Safety Objectives in the Food Industry.
11. Official inspection in the food chain. National plan of control in the food chain

Practical sessions

Development and design of specific self control plans in different food industries in the frame of Food Safety Management.

- Practice nº 1: Practical session. Hazard Analysis.
- Practice nº 2: Practical session: Critical Control Points (CCPs) Identification.
- Practice nº 3: Practical session: Critical Control Points management and HACCP Verification.
- Practice nº 4: Practical session: Traceability plan within the Management System.
- Practice nº 5: Practical session: Shelf-study within Food Safety management
- Practice nº 6: Practical session: Applied audit of Food Safety.
- Practice nº 7. Presentation and public discussion of the management model develop by the groups

4.4. Course planning and calendar

Dates sessions will be described in detail together with those of other tasks and subjects, along with the rest of subjects of fourth course in the Degree of Food Science and Technology on the website of the Faculty of Veterinary Medicine: (<https://veterinaria.unizar.es/academico/plan-estudios-grado-cta/>). This link will be updated at the beginning of each academic year.