

26234 - Management of Food Safety

Información del Plan Docente

Academic Year	2017/18
Faculty / School	105 - Facultad de Veterinaria
Degree	294 - Degree in Food Science and Technology
ECTS	6.0
Year	4
Semester	First semester
Subject Type	Compulsory
Module	---

1.General information

1.1.Introduction

1.2.Recommendations to take this course

1.3.Context and importance of this course in the degree

1.4.Activities and key dates

2.Learning goals

2.1.Learning goals

2.2.Importance of learning goals

3.Aims of the course and competences

3.1.Aims of the course

3.2.Competences

4.Assessment (1st and 2nd call)

4.1.Assessment tasks (description of tasks, marking system and assessment criteria)

5.Methodology, learning tasks, syllabus and resources

5.1.Methodological overview

The learning process of the course is based on theoretical exposition activities by the teacher, joint development of models of self-control and HACCP, special practices related to visits in food industries and a work developed by the students under the supervision of the teacher.

26234 - Management of Food Safety

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 group will be personally supervised by the teacher. 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.

5.2.Learning tasks

The learning activities scheduled include 39 hours of participatory lectures, 18 hours of practical activities based on selfcontrol models an HACCP and 3 hours of visits to food industries.

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 six 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 be consist of identifying specific hazards, in the following session the Critical Control Points (CCPs) 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. Traceability will be integrated within the HACCP system in one session. Shelf-life determination in each process will be developed in the fifth session. All the students will do a power point presentation of the management model in the last session and they also be encouraged to discuss all the aspects related to the HACCP system.

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

Student's education will be complemented through the scheduled visits to centers, institutions, laboratories or food companies to learn on-site about the practical application of the knowledge acquired

26234 - Management of Food Safety

5.3.Syllabus

The program that the student is offered to help you achieve the expected results includes the following aspects

1: Development of lectures.

1st Block. - Self-control plan in the food industry and food safety management system.

- The hazard analysis and Critical Control Points (CCPs) will be established as a Food Safety Management system in the food industry. Hazard Analysis and Critical Control Point system (HACCP).

- Traceability as an essential aspect to guarantee food safety. Traceability concept. Types of traceability. Traceability Plan.

- Shelf life study in the food safety management. Shelf life concept. Calculation and Development.

2nd Block. - Verification of self-control systems

- Audits of Food Safety Management Systems. Concept and principles of the audit. Phases of an audit.

3rd Block.- Other Food Safety tools.

- Precautionary principle. Risk assessment. Take decisions in the food industry and public administration.

- Food Safety Objectives.

26234 - Management of Food Safety

- Risk Communication measures.

- Crisis management and food alerts.

4th Block.- Managements Standards of Food Safety: Food Safety Management

ISO 22000:2005, BRC Standard, IFS Standard, Global G.A.P. Others: (FSSC 22000, SQF Standards, Meat Standards...)

5th Block.- Requirements of Food Safety in food foreign trade.

- Food Safety and Hygiene requirements in European food trade and other countries.

- Food Safety and hygiene requirements to export to third countries: Regulation Framework for meat and meat products.

- Exports to third countries with specific agreements. Food Safety requirements in USA and Canada.

6th Block.- National and International Control of Food Plans.

- National Control in the Food Chain (PNIR)

- National Controls in the European Union

- International Plans.

26234 - Management of Food Safety

2: Practical sessions

Development and design of specific selfcontrol 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: Presentation and public discussion of the management model developed by the groups

3: Visits

Practical application of food safety management models in food safety laboratories, institutions, centers and industries.

5.4.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: <http://veterinaria.unizar.es/gradocta/> . This link will be updated at the beginning of each academic year.

5.5.Bibliography and recommended resources

[BB: Bibliografía básica / BC: Bibliografía complementaria]

- [BB] Agencia Catalana de Seguridad Alimentaria. Guía para la gestión de los alérgenos y el gluten en la industria alimentaria. [Para acceder al texto completo ver URL]
- [BB] El autocontrol en los establecimientos alimentarios : Guía para la aplicación del autocontrol basado en el Sistema de Análisis de Peligros y Puntos de Control Crítico/ Agencia Catalana de la Seguridad Alimentaria.

26234 - Management of Food Safety

- Barcelona : Agencia Catalana de la Seguridad Alimentaria, 2005 [Para acceder al texto completo mirar URL]
- [BB] Felipe Tablado, Carlos R.. Manual de higiene y seguridad alimentaria en hostelería / Carlos Felipe Tablado, Jesús Felipe Gallego . Madrid [etc.] : Thompson ; Paraninfo, D.L. 2004.
- [BB] Garantía de la inocuidad y calidad de los alimentos: directrices para el fortalecimiento de los sistemas nacionales de control de los alimentos. Roma : FAO, 2003 [Para acceder al texto completo mirar UR]
- [BB] HACCP : manual del auditor certificado / ASQ Food, Drug, and Cosmetic Division ; John G. Surak y Steven Wilson, editores ; [traducción de Blas Borde Lekona] . 2ª ed. Zaragoza : Acribia, D. L. 2016
- [BB] Hutkins, Robert W. : Microbiology and technology of fermented foods / Robert Hutkins . - 1st ed. Iowa : Blackwell Publishing, 2006
- [BB] Mortimore, Sara. HACCP : enfoque práctico / Sara Mortimore, Carol Wallace ; traducción ...Blas Borde-Lekona . 2a ed. Zaragoza : Acribia, D.L. 2001
- [BB] Requisitos previos de higiene y trazabilidad para la implantación del sistema de autocontrol (APPCC) en el sector agroalimentario / Generalitat Valenciana. Consejería de Sanidad y Federación Empresarial de Agroalimentación de la Comunidad Valenciana. Valencia: Fecacova, 2001
- [BB] Sistema de análisis de peligros y control de puntos críticos (HACCP). Directrices para su aplicación. Higiene de los alimentos / Codex Alimentarius Commission. Anexo al CAC/RCP 1-1969, rev. 3. Supl. al vol. 1B, Alinorm 1997/13, 25-33. [Para acceder al texto completo ver URL]
- [BB] Sistemas de calidad e inocuidad de los alimentos : manual de capacitación sobre higiene de los alimentos y sobre el sistema de análisis de peligros y de puntos críticos de control (APPCC) / publicado por la Organización de las Naciones Unidas para la Agricultura y la Alimentación y el Ministerio de Sanidad y Consumo de España . Roma : FAO ; Madrid : Ministerio de Sanidad y Consumo , 2002 [Para acceder al texto completo mirar URL]

Listado de URL

- ACSA. Guía para la gestión de los alérgenos y el gluten en la industria alimentaria [https://www.gencat.cat/salut/acsa/html/ca/dir2913/pdf/guia_alergenos.pdf]
- AECOSAN. Agencia Española de Consumo, Seguridad Alimentaria y Nutrición [<http://www.aesan.msc.es/>]
- Agencia Aragonesa de Seguridad Alimentaria [<http://www.aragon.es/DepartamentosOrganismosPublicos/Departamentos/DesarrolloRuralSostenibilidad/AreasTematicas/>]
- Agencia Catalana de Seguridad Alimentaria [<http://www.gencat.cat/salut/acsa/>]
- Agencia Federal Norteamericana de Control y Prevención de Enfermedades, incluyendo aquellas transmitidas por alimentos. [<http://www.dpd.cdc.gov/dpdx/>]
- Autoridad Europea de Seguridad Alimentaria (EFSA) [<http://www.efsa.europa.eu/>]
- Codex Alimentarius. Normas internacionales e los alimentos [<http://www.codexalimentarius.org/standards/list-of-standards/es/>]
- Comisión Europea sobre Seguridad Alimentaria [http://europa.eu/pol/food/index_es.htm]
- El autocontrol en los establecimientos alimentarios : Guía para la aplicación del autocontrol basado en el Sistema de Análisis de Peligros y Puntos de Control Crítico [http://www.gencat.cat/salut/acsa/html/es/dir1599/guia_autocontrol_es_entera.pdf]
- ELIKA . Agencia de Seguridad Alimentaria del País Vasco [<http://www.elika.net/es/>]
- Garantía de la inocuidad y calidad de los alimentos : directrices para el fortalecimiento de los sistemas nacionales de control de los alimentos [<http://www.fao.org/docrep/006/y8705s/y8705s00.htm>]
- Organización de las Naciones Unidas para la Agricultura y la Alimentación [http://www.fao.org/index_en.htm]
- Sistema de análisis de peligros y de puntos críticos de control (HACCP) y directrices para su aplicación. Anexo al CAC/RCP-1 (1969), Rev. 3 (1997) [<http://www.fao.org/docrep/005/y1579s/y1579s03.htm>]
- Sistemas de calidad e inocuidad de los alimentos : manual de capacitación sobre higiene de los alimentos y sobre el sistema de análisis de peligros y de puntos críticos de control (APPCC) [<http://www.fao.org/docrep/005/w8088s/w8088s00.htm>]