1. General information

Course: QUALITY ASSURANCE AND FOOD LAWS AND STANDARDS

Type: CORE COURSE

Degree: 383 - UNDERGRADUATE DEGREE PROGRAMME IN FOOD SCIENCE AND TECHNOLOGY

Center: 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY

Year: 3

Main language: Spanish

Use of additional languages:

Web site:

Code: 58323

ECTS credits: 6

Academic year: 2022-23

Group(s): 22

Duration: First semester

Second language: English

English Friendly: Y

Bilingual: N

Lecturer: MANUELA VANESSA MANCEBO CAMPOS - Group(s): **22**

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2. Pre-Requisites

Not established

3. Justification in the curriculum, relation to other subjects and to the profession

The activity of the food industries is subject to a series of regulatory measures that need to be known by future graduates in food science and technology to develop their professional activity both in the industry, the public administration or the exercise of the free profession.

On the one hand, the food sector is one of the sectors of production on which there is one of the most developed specific legislations, largely because of the direct influence that food consumption can have on the human health. In this sense, it is necessary to know what are the areas of food legislation affecting the food industries (international trade, European Union, Spain, Autonomous communities). In general, it aims to give a vision of the main legislative provisions affecting the various sectors of food production (milk sector, meat sector, etc.), and in particular that affect certain specific sectors of

Regional interest (e.g. the wine sector) or topical (e.g. genetically modified organisms). It should not be forgotten that the responsibility for complying with food legislation usually falls on the food as qualified personnel, and that their non-compliance can lead to administrative and even criminal responsibilities.

On the other hand, the commercial activity of the food industries is subjected, like other sectors of the production, to a series of marketing norms, some of which are obliged to comply, such as the legal mechanisms that they try to ensure certain facets of the term "quality" (for example, the application of hazard analysis and critical Control points for the assurance and management of hygienic-sanitary quality) and the use of this term for differentiation of homologous products (quality denominations). In the voluntary field, but not least, the food companies apply different rules that can be demanded in commercial contracts or that allow easier access to new markets, so it is also necessary to acquire knowledge about the advantages of food standardization and certification, its relationship with accreditation, and the relationship of complementarity existing with food legislation. In this sense, the food technologist must be aware of the importance of the application of food quality management and control systems, and to know the different standards that are application to the food industry (ISO 9000, ISO 22000, BRC, IFS, FSSC 22000, ISO 17025, etc.), the possibilities of integration between them and the operation of the processes of certification and accreditation.

Finally, both the legislative and normalizing activity are dynamic processes, in constant evolution, so the food technologist must be aware that the follow-up of the novelties that occur in the standardization and food legislation is of vital importance for the survival of companies in the food sector, as well as being a tool to achieve advantages from an economic and competitive point of view.

4. Degree competences achieved in this course

Course competences

Code	Description
E18	To adquire knowldege on food legislation and normalization. To counsel legaly, scientifically and technocally the food industry and consumers.
E19	To know the fundamentals of quality and traceability systems and be able to perform their deploy, as well as to evaluate and control the food quality
E22	To perform formation of staff in the food sector
G03	To develop habits of excellence and quality in the professional exercise applying the fundamental human rights, the principles of equality of opportunities and the values of a culture of peace and democratic. Acquiring an ethical commitment and acting according to the professional business ethics and the respect to the environment.
G05	To understand and to use the English language, both written and spoken, applied to the area of the Food Science and Technology. (To be able to acquire this hability, a series of actions that will be specified in every module will be peformed).
G06	To dominate the Technologies of the Information and the Communication (TIC) to user's level, which allows to work in virtual spaces, Internet, electronic databases, as well as with common software packages (e.g. Microsoft Office).
G07	To possess ability of organization and planning, initiative, entrepreneurship and aptitude to be employed in teamworks. To possess capacity of resolution of specific problems of the professional area and to develop the critical reasoning and decision making.
G09	To develop the motivation for quality, the capacity to adapt to new situations and the creativity.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

To obtain a global vision of the quality in the food company.

To be able to apply the current food regulation to the development of products and his quality control.

To acquire the key aspects of the quality management and to acquire the necessary aptitude to implant and support a quality system in conformity with the ISO Procedure 9000 and 9001.

To know the field of the Food Legislation that concern the products and food processing industries (International, European, and local).

To establish the advantages of the Food Normalization and Certification, its relation with the Accreditation, and its complementarity with the Food Legislation.

Additional outcomes

To acquire the key aspects of food safety and security management, and acquire the necessary capacity to implement and maintain a food safety management system in accordance with ISO 22000, BRC, IFS standards.

6. Units / Contents

Unit 1: DEVELOPMENT OF SPANISH FOOD MANAGEMENT; SPANISH FOOD CODE

Unit 2: GENERAL SANITARY FOOD REGISTER

Unit 5: MATERIALS FOR FOOD USES
Unit 6: LABELLING, PRESENTATION AND PUBLICITY OF FOOD PRODUCTS
Unit 7: ADDITIVES, ENZYMES AND AROMAS IN FOODS
Unit 8: IMPURITIES, CONTAMINANTS AND RESIDUES IN FOODS
Unit 9: GENETICALLY MODIFIED ORGANISMS
Unit 10: QUALITY DENOMINATIONS OF FOOD PRODUCTS
Unit 11: WINE LEGISLATION
Unit 12: FOOD HANDLERS
Unit 13: FOOD SECURITY: HAZARD ANALYSIS AND CRITICAL CONTROL POINTS (HACCP)
Unit 14: STANDARDISATION, CERTIFICATION AND ACCREDITATION IN FOOD MATTERS
Unit 15: FOOD QUALITY: QUALITY MANAGEMENT SYSTEMS (ISO 9000 STANDARDS)
Unit 16: FOOD SAFETY MANAGEMENT SYSTEMS (ISO 22000 STANDARS)
Unit 17: OTHER FOOD SAFETY MANAGEMENT SYSTEMS. BRC AND ISF STANDARDS
Unit 18: FOOD DEFENCE AND FOOD FRAUD
Unit 19: OTHER CERTIFICATIONS: STANDARD UNE-EN_ISO 17025, WELFAIR

ADDITIONAL COMMENTS, REMARKS

Contents are divided into two blocks: from Unit 1 to Unit 13 included, corresponds to the part of Food Legislation; and from Unit 14 to Unit 19, corresponds to the Quality Management part.

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Combination of methods	E18 E19 E22	1.46	36.5	N	-	
Study and Exam Preparation [OFF-SITE]	Self-study	E18 E19 G07	0.9	22.5	N	-	SELF-EMPLOYED AND PERSONAL STUDENT WORK: PREVIOUS, DURING AND POST, to study and assimilate the theoretical concepts that will be addressed in the classes. Autonomous work to solve questionnaires, continuous evaluation and to solve the proposed problems.
Group tutoring sessions [ON-SITE]	Group tutoring sessions	E18 E19 G03 G09	0.2	5	N	-	We will share doubts about the contents and they will be solved with the help of the teacher and classmates
Final test [ON-SITE]	Assessment tests	E18 E19	0.14	3.5	Y	Y	Exam with multiple choice questions, short answers and case resolution
Other off-site activity [OFF-SITE]	Combination of methods	E18 E19 E22 G03 G05 G06 G07 G09	2.7	67.5	Y	N	
Problem solving and/or case studies [ON-SITE]	Cooperative / Collaborative Learning	E18 E19 E22 G03 G07 G09	0.6	15	Y	N	
Total:			**6**	**150**			
Total credits of in-class work: 2.4				**Total class time hours: 60**			
Total credits of out of class work: 3.6				**Total hours of out of class work: 90**			

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Theoretical exam	70.00%	70.00%	
Projects	14.00%	20.00%	Preparation of a group work on the application of the HACCP system to an industry. Preparation of a group work on labeling interpretation.
Assessment of problem solving and/or case studies	10.00%	0.00%	Cases to be solved individually or in groups in class with the teacher's guidance
Portfolio assessment	6.00%	10.00%	Online forums, search exercises and / or comments on legal texts and regulations
Total:	**100.00%**	**100.00%**	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject , an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

In the final grade for the course, the face-to-face exam will have a weight of 70% and the rest of the activities (work, face-to-face and online activities) 30%.

It is necessary to have at least a 4/10 in the face-to-face exam to obtain an average mark with the rest of the activities.

If the 4/10 is not reached in the exam or the average mark is not 5, the marks of the rest of the activities are kept for the extraordinary call.

Non-continuous evaluation:

In the final grade for the course, the face-to-face exam will have a weight of 70% and the rest of the activities (work and non-face-to-face activities) 30%.

It is necessary to have at least a 4/10 in the face-to-face exam to obtain an average mark with the rest of the activities.

If the 4/10 is not reached in the exam or the average mark is not 5, the marks of the rest of the activities are kept for the extraordinary call.

Specifications for the resit/retake exam:

In the final grade for the course, the face-to-face exam will have a weight of 70% and the rest of the activities (work, face-to-face and online activities) 30%.

It is necessary to have at least a 4/10 in the face-to-face exam to obtain an average mark with the rest of the activities.

If the 4/10 is not reached in the exam or the average mark is not 5, the course is suspended.

Specifications for the second resit / retake exam:

In the final grade for the course, the face-to-face exam will have a weight of 70% and the rest of the activities (work, face-to-face and online activities) 30%.

It is necessary to have at least a 4/10 in the face-to-face exam to obtain an average mark with the rest of the activities.

If the 4/10 is not reached in the exam or the average mark is not 5, the course is suspended.

9. Assignments, course calendar and important dates

10. Bibliography and Sources

Author(s)	Title/Link	Publishing house	City	ISBN	Year	Description
AENOR	https://www.mapa.gob.es/es/alimentacion/legislacion/ http://www.aecosan.msssi.gob.es/AECOSAN/web/seguridad_alimentaria/seccion/legislacion_seg_alimentaria.htm Gestión de la calidad. https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	AENOR, D. L.	Madrid	978-84-8143-703-4	2010	
Wallace, Carol	HACCP: enfoque práctico https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Acribia, D.L.	Zaragoza	978-84-200-1180-6	2018	
Debesa, Teresa	Principios Generales de Legislación alimentaria https://dialnet.unirioja.es/servlet/catart?codigo=2171590			0214-9192	2006	
Deleuze Isasi, Paloma	Legislación alimentaria : Código alimentario español y sus disposiciones complementarias / edición preparada por Paloma Deleuze Isasi. (2006) https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Tecnos	Madrid	84-309-4314-5	2006	
Härtel, Ines.Budzinowski, Roman	Food security, food safety, food quality : current developments and challenges in European Union Law	[Oxford] : Hart Publishing ; Baden-Baden, Germany : Nomos		978-1-50991-131-8 (H	2016	
Wallace, Carol	https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15 HACCP : una guía breve para la industria alimentaria https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Acribia	Zaragoza	978-84-200-1190-5	2018	
AENOR	Sistemas de gestión de la calidad : requisitos (ISO 9001:2015). https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	AENOR, D. L.	Madrid	84-8143-247-4	2015	
López Benítez, Mariano	La denominación de origen : análisis crítico de una institución jurídico-pública	Albolote (Granada) : Comares		978-84-9045-894-5	2019	
Recuerda Girela, Miguel Ángel	https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15 Seguridad alimentaria y nuevos alimentos : régimen jurídico-administrativo https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Thomson-Aranzadi	Pamplona	84-9767-666-1978-84-	2006	
	Normas de calidad de los alimentos https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	A. Madrid Vicente	Madrid	84-87440-02-9	1990	
Bevilacqua, Darío	Introduction to global food-safety law and regulation / Dario Bevilacqua. (2015) https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Groningen : Europa Law Publishing		978-90-8952-169-9	2015	
Madrid Vicente, AntonioMadrid Cenzano, Javier	Los aditivos en los alimentos : (según la normativa de la Unión Europea y la legislación española https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	AMV Ediciones : Mundi Prensa,	Madrid	978-84-942850-4-2	2014	
	Nuevas normas de calidad de los alimentos https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Mundi Prensa : A. Madrid Vicente	Madrid	84-87440-57-6 (A.Mad	1994	
Sperber, William H.	Food safety for the 21st century : managing HACCP and food safety throughout the global supply chain https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Wiley-Blackwell, cop.	Chichester (West Sussex)	978-1-4051-8911-8	2011	
España. Leyes, etc. alimentarias	Código de derecho alimentario / edición preparada por Miguel Ángel Recuerda Girela. https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Cizur Menor	Navarra	978-84-9014-554-8 (v	2013	
Parras Rosa, Manuel	Denominaciones de origen e indicaciones geográficas en la Unión Europea : cinco lustros de luces y sombras https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Marcial Pons	Madrid	978-84-9123-493-7	2018	
	HACCP, manual del auditor de calidad / ASQ Food, Drug and Cosmetic Division https://catalogobiblioteca.uclm.es/cgi-bin/abnetopac/O7541/IDb790603d/NT15	Acribia	Zaragoza	84-200-1010-3	2003	
Esteve, Teresa	Organismos Modificados Genéticamente (OMG): 'Detección, legislación y evaluación de riesgos' http://hdl.handle.net/2072/449350				2021	
Mangas Roldán, Juana María	La legislación alimentaria española : de las ordenanzas sanitarias a los reglamentos europeos de seguridad alimentaria https://dialnet.unirioja.es/servlet/tesis?codigo=78719				2012	Tesis