



## Information about the subject

**Degree:** Official Master's Degree in Integrated Management of Quality Systems, Environment and Occupational Health and Safety

**Faculty:** Faculty of Veterinary Medicine and Experimental Sciences

**Code:** 1890031 **Name:** Management of Prevention of Occupational Risks

**Credits:** 6,00 **ECTS Year:** 1 **Semester:** 2

**Module:** Theoretical

**Subject Matter:** Occupational Health and Safety Management **Type:** Compulsory

**Department:**

**Type of learning:** Blended

**Languages in which it is taught:** Spanish

**Lecturer/-s:**



## Module organization

### Theoretical

Subject Matter	ECTS	Subject	ECTS	Year/semester
Integrated Management	15,00	Integrated Management	15,00	1/2
Quality management	6,00	Quality Management	6,00	1/2
Environmental Management	6,00	Environmental Management	6,00	1/2
Occupational Health and Safety Management	6,00	Management of Prevention of Occupational Risks	6,00	1/2
Audits and Certification	6,00	Audits of Management Systems	6,00	1/2



## Learning outcomes

At the end of the course, the student must be able to prove that he/she has acquired the following learning outcomes:

- R1 Know the specific requirements (not integrable) of an occupational health and safety management system based on the ISO 45001 standard
- R2 Know the regulatory framework in prevention of occupational hazards in Spain
- R3 Knowing how to plan preventive action against risks linked to safety conditions
- R4 Knowing how to plan preventive action against risks linked to the working environment
- R5 Knowing how to plan preventive action against risks linked to the workload
- R6 Knowing how to plan preventive action against risks linked to the organization of work
- R7 Knowing how to plan the health surveillance
- R8 Carry out training and communication in occupational safety and health



## Competencies

Depending on the learning outcomes, the competencies to which the subject contributes are (please score from 1 to 4, being 4 the highest score):

BASIC		Weighting			
		1	2	3	4
CB6	Possess and understand knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context			X	
CB7	That the students know how to apply the acquired knowledge and their problem-solving capacity in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study				X
CB8	That students be able to integrate knowledge and face the complexity of formulating judgments based on information that, being incomplete or limited, includes reflections on the social and ethical responsibilities				X
CB10	That students possess the learning skills to continue studying in a way that will be largely self-directed or autonomous			X	
GENERAL		Weighting			
		1	2	3	4
CB1	Know, use and apply information and communication technologies (ICT)			X	
CB2	Identify and apply, with criteria, the legal framework on environment and safety and health at work				X
CB3	Know, at international, European and national level, how the bodies responsible for standardization are organized	X			
SPECIFIC		Weighting			
		1	2	3	4



CE1	Implement, maintain and improve an integrated system of quality management, environment and safety and health at work, meeting international standards, developing the functions of the representative of business management	X		
CE2	Identify the common and particular elements of each of the management systems implemented, taking as a reference the requirements of the International Standards	X		
CE3	Implement the policy and objectives of the integrated management system and be able to continually review and improve them		X	
CE6	Know the minimum requirements of an Integrated Management System and the documents that are part of it, and be able to prepare, complete and document them correctly		X	
CE7	Know the legal requirements regarding the environment and safety and health at work, and how they affect organizations, implementing methods to ensure compliance			X
CE8	Implement advanced models of Quality Management		X	
CE9	Manage and coordinate the maintenance of the Integrated Management System	X		
CE11	Carry out specialized studies in the field of quality (AMFE, 5S, Six Sigma), the environment (environmental diagnoses, minimization and impact studies) and occupational health and safety (risk assessment, lighting, temperature, ergonomical aspects, etc.)	X		



## Assessment system for the acquisition of competencies and grading system

Assessed learning outcomes	Granted percentage	Assessment method
R1, R2, R3, R4, R5, R6, R7, R8	20,00%	Carrying out virtual evaluations
R1, R2, R3, R4, R5, R6, R7, R8	70,00%	Conducting in-person evaluations
R1, R2, R3, R4, R5, R6, R7, R8	0,00%	Presentation of deliverable activities
R1, R2, R3, R4, R5, R6, R7, R8	10,00%	Attendance and participation in face-to-face sessions

### Observations

#### MENTION OF DISTINCTION:

According to Article 22 of the Regulations governing the Evaluation and Qualification of UCV Courses, the mention of "Distinction of Honor" may be awarded by the professor responsible for the course to students who have obtained, at least, the qualification of 9 over 10 ("Sobresaliente"). The number of "Distinction of Honor" mentions that may be awarded may not exceed five percent of the number of students included in the same official record, unless this number is lower than 20, in which case only one "Distinction of Honor" may be awarded.

## Learning activities

The following methodologies will be used so that the students can achieve the learning outcomes of the subject:

- M1 Exposure of contents by the teacher, analysis of competencies, explanation and demonstration of abilities, skills and knowledge in the classroom
- M2 Group work sessions under the supervision of the teacher/s of the subject. Study of real or fictitious systems management cases. Significant construction of knowledge through student interaction and activity. Critical analysis



- M7 Presentation, by the students, of the results of the practical sessions and correction, through the online platform, of all the practical cases presented, preparing a single document of conclusions valid for all the groups
- M8 Set of tests, mainly written, used for the final evaluation of the student. The evaluation may consist of multiple-choice tests, developmental exercises or a combination of both
- M9 Set of written tests, test type, which are answered and corrected on the online platform
- M10 Virtual presentation of conclusions from practical exercises (real or fictitious) in a given time
- M15 Group preparation of readings, essays, problem solving, seminars, papers, memoirs, etc. for presentation or delivery in theory classes, practical classes and/or small group tutorials
- M16 Student's study: individual preparation of readings, essays, problem solving, seminars, papers, reports, etc. to be presented or delivered in theory classes, practical classes and/or small group tutorials



## IN-CLASS LEARNING ACTIVITIES

	LEARNING OUTCOMES	HOURS	ECTS
IN PERSON CLASSES M1	R1, R2, R3, R4, R5, R6, R7, R8	22,50	0,90
PRACTICAL CLASSES M2	R1, R2, R3, R4, R5, R6, R7, R8	5,00	0,20
FACE-TO-FACE ASSESSMENT M8	R1, R2, R3, R4, R5, R6, R7, R8	2,50	0,10
<b>TOTAL</b>		<b>30,00</b>	<b>1,20</b>

## LEARNING ACTIVITIES OF AUTONOMOUS WORK

	LEARNING OUTCOMES	HOURS	ECTS
VIRTUAL PRACTICE SESSION M7	R2, R3, R4, R5, R6, R7	5,00	0,20
VIRTUAL EVALUATION M9	R2, R3, R4, R5, R6, R7	30,00	1,20
VIRTUAL PRESENTATION OF GROUP WORK M7	R3, R4, R5, R6	5,00	0,20
TEAMWORK M15	R1, R2, R3, R4, R5, R6, R7, R8	40,00	1,60
INDIVIDUAL WORK M16	R1, R2, R3, R4, R5, R6, R7, R8	40,00	1,60
<b>TOTAL</b>		<b>120,00</b>	<b>4,80</b>



## Description of the contents

Description of the necessary contents to acquire the learning outcomes.

### Theoretical contents:

Content block	Contents
1: Risks linked to safety conditions at work and prevention.	<ul style="list-style-type: none"><li>1.1. Introduction to Safety at Work.</li><li>1.2. Analysis of risk factors due to security conditions.<ul style="list-style-type: none"><li>1.2.1. Places and workspaces.</li><li>1.2.2. Installations, machines and tools.</li><li>1.2.3. Electrical hazards.</li><li>1.2.4. Lifting, transport and storage.</li><li>1.2.5. Collective and individual protection.</li></ul></li><li>1.3. Safety standards and signs.</li></ul>
2: Risks linked to the work environment and their prevention.	<ul style="list-style-type: none"><li>2.1. Introduction to Industrial Hygiene.</li><li>2.2. Analysis of risk factors due to the work environment: Chemical agents.</li><li>2.3. Analysis of risk factors due to the work environment: Physical agents.<ul style="list-style-type: none"><li>2.3.1. Noise.</li><li>2.3.2. Vibrations</li><li>2.3.3. Hygrothermal conditions.</li><li>2.3.4. Non-ionizing radiation.</li><li>2.3.5. Ionizing radiation.</li></ul></li><li>2.4. Analysis of risk factors due to the work environment: Biological agents.</li></ul>
3: Risks linked to workload and their prevention	<ul style="list-style-type: none"><li>3.1. Introduction to Ergonomics.</li><li>3.2. Analysis of risk factors due to the organization of work and its prevention.<ul style="list-style-type: none"><li>3.2.1. Workload. Physical load.</li><li>3.2.2. Workload. Mental load.</li><li>3.2.3. Workload. Fatigue.</li><li>3.2.4. Environmental ergonomics.</li></ul></li><li>3.3. Workload. Evaluation methods.</li><li>3.4. Ergonomics intervention methodology.</li></ul>



4: Risks linked to the organization of work and their prevention

- 4.1. Introduction to Psychosociology.
- 4.2. Analysis of risk factors of a psychosocial nature.
- 4.3. Consequences and effects of psychosocial factors on individuals and the organization.
- 4.4. Evaluation of psychosocial factors and their consequences.
- 4.5. Psychosocial intervention methods.

Exam

Exam

## Temporary organization of learning:

Block of content	Number of sessions	Hours
1: Risks linked to safety conditions at work and prevention.	4,50	9,00
2: Risks linked to the work environment and their prevention.	4,50	9,00
3: Risks linked to workload and their prevention	2,50	5,00
4: Risks linked to the organization of work and their prevention	2,50	5,00
Exam	1,00	2,00



## References

- Sala Franco T, Arnau Navarro F, Comentarios a la Ley de prevención de riesgos laborales. Valencia: Tirant lo Blanch 1996.
- Palacios Ruiz J. Guía para la Prevención de Riesgos Laborales. Fomento del Empleo. Madrid 1999.
- Sánchez Iglesias A L, Grau Ríos M. Nueva normativa de prevención de riesgos laborales: aplicación práctica. Madrid: Fremap 1999.
- Vaquero Puerta J L, Ceña Callejo R. Prevención de Riesgos Laborales: Seguridad, Higiene y Ergonomía. Madrid: Pirámide 1999.
- Lafuente Pastor, V. Pedro. Marco jurídico de la seguridad y salud en el trabajo.
- Pizarro Garrido, N. Seguridad en el trabajo. 3ª Edición.
- Consejería de empleo de Andalucía. Técnico de Seguridad y salud en el trabajo.
- Junta de Castilla y León. Historia de la seguridad en el trabajo en España.
- Real Decreto 486/1997, de 14 de abril, por el que se establecen las disposiciones mínimas de seguridad y salud en los lugares de trabajo.
- INSHT. Guía Técnica para la evaluación y prevención de los riesgos relativos a la utilización de los lugares de trabajo. 2015.
- NTP 490: Trabajadores minusválidos: diseño del puesto de trabajo.
- NTP 481: Orden y limpieza de lugares de trabajo.
- Real Decreto 1644/2008, de 10 de Octubre por el que se establecen las normas para la comercialización y puesta en servicio de las máquinas.
- Real Decreto 1215/1997, de 18 de julio por el que se establecen las disposiciones mínimas de seguridad y salud para la utilización por los trabajadores de los equipos de trabajo y sus modificaciones.
- INSHT. Guía Técnica para la evaluación y prevención de los riesgos relativos a la utilización de los equipos de trabajo. (1ª Parte).
- Guía de marcado CE. Aplicación de las Directivas de Nuevo Enfoque para fabricantes de máquinas y productos incluidos en la Directiva de Máquinas. AIMME. 2011.
- LEGISMAQ. Confederación Regional de Empresarios de Aragón. Aplicación Práctica de legislación sobre máquinas y equipos de trabajo.
- Gómez G. Manual para la Prevención de Riesgos Laborales. Valencia: Editorial CISS, S.A. 2001.
- Tamborero, JM. Herramientas manuales (I, II y III): Condiciones generales de seguridad. Notas Técnicas de Prevención nº 391, 392 y 393. INSHT.
- Cortés, JM. Técnicas de Prevención de Riesgos Laborales. Seguridad e Higiene en el Trabajo. 9ª ed. Ed. TEBAR. Madrid. 2007.



## Addendum to the Course Guide of the Subject

Due to the exceptional situation caused by the health crisis of the COVID-19 and taking into account the security measures related to the development of the educational activity in the Higher Education Institution teaching area, the following changes have been made in the guide of the subject to ensure that Students achieve their learning outcomes of the Subject.

**Situation 1: Teaching without limited capacity** (when the number of enrolled students is lower than the allowed capacity in classroom, according to the security measures taken).

In this case, no changes are made in the guide of the subject.

**Situation 2: Teaching with limited capacity** (when the number of enrolled students is higher than the allowed capacity in classroom, according to the security measures taken).

In this case, the following changes are made:

### 1. Educational Activities of Onsite Work:

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject will be made through a simultaneous teaching method combining onsite teaching in the classroom and synchronous online teaching. Students will be able to attend classes onsite or to attend them online through the telematic tools provided by the university (videoconferences). In any case, students who attend classes onsite and who attend them by videoconference will rotate periodically.

In the particular case of this subject, these videoconferences will be made through:

☒ Microsoft Teams

☐ Kaltura



## **Situation 3: Confinement due to a new State of Alarm.**

In this case, the following changes are made:

### **1. Educational Activities of Onsite Work:**

All the foreseen activities to be developed in the classroom as indicated in this field of the guide of the subject, as well as the group and personalized tutoring, will be done with the telematic tools provided by the University, through:

☒

Microsoft Teams

☐

Kaltura

Explanation about the practical sessions:



## 2. System for Assessing the Acquisition of the competences and Assessment System

### ONSITE WORK

#### Regarding the Assessment Tools:

☒

The Assessment Tools will not be modified. If onsite assessment is not possible, it will be done online through the UCVnet Campus.

☐

The following changes will be made to adapt the subject's assessment to the online teaching.

Course guide		Adaptation	
Assessment tool	Allocated percentage	Description of the suggested changes	Platform to be used

The other Assessment Tools will not be modified with regards to what is indicated in the Course Guide.

#### Comments to the Assessment System: