

## Course guide

### 240810 - 240810 - Occupational Health and Safety Management

Last modified: 06/06/2024

**Unit in charge:** Barcelona School of Building Construction  
**Teaching unit:** 732 - OE - Department of Management.

**Degree:** MASTER'S DEGREE IN OCCUPATIONAL HEALTH AND SAFETY (Syllabus 2016). (Compulsory subject).

**Academic year:** 2024    **ECTS Credits:** 3.0    **Languages:** Spanish

#### LECTURER

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**Coordinating lecturer:** Carles Salas Ollé

**Others:** Profesores invitados para puntos específicos del programa (Ex. Sr. J. Rodríguez Luna: "Integración de Costes en la PRL", Sr. Sebastià Jané "Auditorías en PRL")

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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##### Specific:

1. Know the relation between occupational and health safeties.
2. Identify and distinguish the different integration models for the prevention in the management of the company.
3. Recognise and identify the legislation in occupational health and be available to continue the actualizations.
4. Recognise the structure of the prevention system: public organisms and competences and benefit societies, recognise and explain the legislation and specific technical regulations regarding to the occupational security and dispose the sufficient technical knowledge to carry out risk evaluations and set corrective measures in front of general threats related to the work, installations, working devices, fire risk and explosion. Recognise some techniques similar to the prevention: security in the product, management of assets and road security, and recognise the communication techniques regarding to the prevention of occupational risks.
5. Know to act regarding to first aid and promote the responsibility system regarding to the prevention of occupational risks.
6. Know to develop emergency and security plans, make training and information plans assigned to workers, including the detection of needs and establish the evaluating systems and monitoring measures, lay out corrective measures in front of risks of chemical nature, physical or biological; carry out risk evaluations and set out corrective measures related to the physical and mental load at work; make the epidemiologic study design to identify risk factors of occupational nature, apply its basics and manipulation and applications of the main chemical analysis techniques in the hygienic world.
7. Be able to analyse the main health problems related to work.
8. Be able to distinguish between labour accidents, professional diseases and diseases related to work.
9. Be able to promote conducts, habits, consumption and health life styles, with the active participation of the workers as main role of the own health. Be able to promote the preventing culture within the company and the creation of health environments.
10. Be able to recognise action measures in front of emergencies and disasters. Recognise the specific problems in health security at work in sensitive workers such as young and elder workers, disabled people or pregnant women, and identify and recognise the main instrumentation techniques to assess the fatigue and not the comfort at work.

#### TEACHING METHODOLOGY

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Face-to-face training with student participation following the work plan as a reference.

Face-to-face tutorials for the specific attention of students who need it.

Tutorials and online monitoring through the UPC (Atenea) campus.

Group work (2) on basic aspects of risk prevention management (preparation of a prevention plan and preparation of an audit plan)

Discussion groups to promote debates on behavioral aspects that directly affect management.

Bibliographic and / or internet searches on various topics related to the subject.

## LEARNING OBJECTIVES OF THE SUBJECT

Knowledge of Occupational Risk Prevention management techniques and systems.

Knowledge:

Prepare and disseminate the occupational risk prevention policy. Management commitment.

Organization of prevention appropriate to the characteristics of the company, determination of functions and responsibilities of the different levels of the organization. The importance of the organization chart.

Adoption of a management system consistent with the objectives and culture of the company.

Implementation of basic techniques for the prevention of occupational hazards.

Monitoring of the actions and control of the results obtained.

Integration of prevention in the company.

Cost-benefit analysis of risk prevention in the company

## STUDY LOAD

Type	Hours	Percentage
Hours large group	27,0	36.00
Self study	48,0	64.00

**Total learning time:** 75 h

## CONTENTS

### -BASIC DEFINITIONS

**Description:**

Basic and elementary concepts on the management of PRL systems and systems.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

### -ELEMENTS OF THE MANAGEMENT SYSTEM. FROM QUALITY TO PREVENTION. CIRCLE OF CONTINUOUS IMPROVEMENT.

**Description:**

Deming's circle and its development in the preventive system.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

### -PARTICIPATION AND INTEGRATION AS KEY ELEMENTS

**Description:**

Integration of the PRL and basic needs for it.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

#### - ORP REGULATIONS (LAW 31/95. RSP 39/97)

**Description:**

Basic regulations in PRL and its operational application in companies.

**Full-or-part-time:** 3h

Theory classes: 3h

#### -OCCUPATIONAL RISK PREVENTION PLAN (RD. 604/2006): POLICY, FUNCTIONS AND RESPONSIBILITIES

**Description:**

Regulations and development regarding the PRL plan. Importance of it.

**Related activities:**

Description: Preparation of a company prevention plan for small groups preferably of 3 people.

Support material: Orientation guide on the subject and other support documents that can be consulted on the online campus.

Description of the expected deliverable and link with the evaluation: Self-prepared prevention plan based on the contents explained in the theoretical sessions and diverse documentation on campus, as well as documentation and information collected by the students. It will be delivered via campus and a copy in paper format.

It is scored in computation with work 2) and the average score of both integrates 30% of the final score of each student.

**Full-or-part-time:** 13h

Theory classes: 3h

Self study : 10h

#### -MAIN WORKING GROUPS IN PRL MANAGEMENT: SPA, SPP, SPM, SS COMMITTEE, EMERGENCY TEAMS, PREVENTIVE RESOURCES...

**Description:**

Description and framing in the preventive organization chart of the work groups.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

#### -BASIC PREVENTION TECHNIQUES: IDENTIFICATION AND ASSESSMENT OF RISKS, TRAINING AND INFORMATION, BUSINESS COORDINATION

**Description:**

Basic knowledge of the techniques and their operational and legal implications

**Full-or-part-time:** 3h

Theory classes: 3h

#### -BASIC PREVENTION TECHNIQUES: COMMUNICATION OF RISKS AND INSTRUCTIONS, EMERGENCY MEASURES.

**Description:**

Basic knowledge of the techniques and their operational and legal implications.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

#### **-BASIC PREVENTION TECHNIQUES: SAFETY INSPECTIONS AND WORK OBSERVATIONS, ACCIDENT INVESTIGATIONS**

**Description:**

Basic knowledge of the techniques and their operational and legal implications.

**Full-or-part-time:** 1h 30m

Theory classes: 1h 30m

#### **-CONTROL OF PREVENTIVE EFFECTIVENESS: INTERNAL AND EXTERNAL AUDITS**

**Description:**

The prl audit as a legal and operational element. Implications and needs.

**Full-or-part-time:** 2h

Theory classes: 2h

#### **-INSHT CRITERIA FOR PERFORMING AUDITS**

**Description:**

Knowledge of the references marked from the INSHT.

**Related activities:**

Description: Preparation of an Audit plan for the prevention of occupational risks in the company by small groups, preferably of 3 people.

Support material: Orientation guide on the subject and other support documents that can be consulted on the online campus.

Description of the expected deliverable and link with the evaluation: Self-prepared Audit Plan based on the contents explained in the theoretical sessions and diverse documentation on campus, as well as documentation and information collected by the students. It will be delivered via campus and a copy in paper format.

It is scored in computation with work 1) and the average score of both integrates 30% of the final score of each student.

**Full-or-part-time:** 10h 30m

Theory classes: 0h 30m

Self study : 10h

#### **-ASSESSMENT OF THE RESULTS OF A MANAGEMENT SYSTEM. THE MEASUREMENT OF INTANGIBLES.**

**Description:**

Quantitative and qualitative indicators in PRL

**Full-or-part-time:** 0h 30m

Theory classes: 0h 30m

#### **-COST/BENEFIT OF THE PRL. INTEGRATION OF THE CALCULATION OF COSTS IN THE PRL.**

**Description:**

Need and optimization of the integration of cost calculation in ORP management.

**Full-or-part-time:** 1h

Theory classes: 1h

## STANDARDS FOR PRL MANAGEMENT SYSTEMS. ISO 45001 AND OTHER STANDARDS. PROCESS MANAGEMENT

### Description:

Knowledge of the fundamentals of ISO 45001 and the existence of other standards. Comprehensive management systems (HLS standards)

### Full-or-part-time: 1h

Theory classes: 1h

## GRADING SYSTEM

50% of the final grade will be the result of a test exam of 50 questions.

20% of the final grade will be the result of two open questions to answer.

30% of the final grade will be the result of the grades obtained in the group assignments that will be requested at the time and activity in class (continuous assessment \*)

## EXAMINATION RULES.

Delivery of the two group assignments:

Prevention plan: Half of the semester. The date is specified at the beginning of it.

Audit plan: The day of the exam corresponding to the subject.

Attendance at the training sessions will allow access to the qualification.

## BIBLIOGRAPHY

### Basic:

- Rubio Romero, Juan Carlos. Gestión de la prevención de riesgos laborales : OSHAS 18001 - directrices OIT para su integración con calidad y medioambiente. Madrid: Díaz de Santos, cop. 2002. ISBN 847978525X.
- Bestratén Belloví, Manuel; Marrón Vidal, Miguel Angel. Gestión de la prevención de riesgos laborales en la pequeña y mediana empresa. 2a ed.. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, DL 2005. ISBN 8474256941.
- Bestratén, M. et. al.. Manual de procedimientos de prevención de riesgos laborales : Guía de elaboración [on line]. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, 2013 [Consultation: 02/12/2013]. Available on: [http://www.insht.es/InshtWeb/Contenidos/Documentacion/TextosOnline/Guias\\_Ev\\_Riesgos/Manual\\_Proced\\_Prev\\_Riesgos/Manual\\_procedimientos.pdf](http://www.insht.es/InshtWeb/Contenidos/Documentacion/TextosOnline/Guias_Ev_Riesgos/Manual_Proced_Prev_Riesgos/Manual_procedimientos.pdf).
- Gómez Etxebarría, Genaro. Gestión de la prevención : supuestos prácticos. Valencia: CISS, cop. 2008. ISBN 9788482357188.
- Ortega Espinoza, Jaime Eduardo. "Prevención Integral con Propósito PIP (II)". Mieses Global [on line]. Mieses Global Available on: <http://www.miesesglobal.org/wp-content/uploads/2021/02/Guia-10-Prevencion-integral-II-JORTEGA.pdf>.
- Ortega Espinoza, Jaime Eduardo. "Prevención Integral con Propósito PIP (I)". Mieses Global [on line]. Mieses Global Available on: <http://www.miesesglobal.org/wp-content/uploads/2021/02/Guia-9-Prevencion-Integral-I-JORTEGA.pdf>.

## RESOURCES

### Other resources:

NTP nº 982: Análisis coste beneficio en la acción preventiva (I): bases conceptuales: <http://www.insht.es/InshtWeb/Contenidos/Documentacion/NTP/NTP/Ficheros/961a972/ntp-982w.pdf> />NTP nº 983: Análisis coste beneficio en la acción preventiva (II): estrategias de medición: <http://www.insht.es/InshtWeb/Contenidos/Documentacion/NTP/NTP/Ficheros/961a972/ntp-983w.pdf> />NTP 559: Sistema de gestión preventiva: procedimiento de control de la información y formación preventiva: [http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp\\_559.pdf](http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp_559.pdf) />NTP 565: Sistema de gestión preventiva: organización y definición de funciones preventivas: [http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp\\_565.pdf](http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp_565.pdf) />NTP 558: Sistema de gestión preventiva: declaración de principios de política preventiva:

[http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp\\_558.pdf](http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp_558.pdf) />NTP 898 INSHT: ohsas 18001. sistemas de gestión de la seguridad y salud en el trabajo: implantación (I): <http://www.insht.es/InshtWeb/Contenidos/Documentacion/NTP/NTP/Ficheros/891a925/898w.pdf> />NTP 899 INSHT: ohsas 18001. sistemas de gestión de la seguridad y salud en el trabajo: implantación (II): <http://www.insht.es/InshtWeb/Contenidos/Documentacion/NTP/NTP/Ficheros/891a925/899w.pdf> />NTP 592: La gestión integral de los accidentes de trabajo (I): tratamiento documental e investigación de accidentes: [http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp\\_592.pdf](http://www.insht.es/InshtWeb/Contenidos/Documentacion/FichasTecnicas/NTP/Ficheros/501a600/ntp_592.pdf) />NTP 924 INSHT: Causas de accidentes: clasificación y codificación: <http://www.insht.es/InshtWeb/Contenidos/Documentacion/NTP/NTP/Ficheros/891a925/924w.pdf>