

Course guide

240808 - 240808 - Workplace Safety I

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:** 4.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: OSCAR MARTOS CABRERA

Others:

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. 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.
2. 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.
3. Be able to carry out security plans, and elaborate danger specifications for the selection of safe devices with the manipulation and maintenance.
4. 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

The teaching of the subject will involve a set of classroom sessions that will be complemented by carrying out exercises, mainly at home. The tutoring sessions will serve to resolve doubts and concerns.

The basic teaching material will be the INSHT text "Safety at Work" complemented by various Technical Guides, Prevention Technical Notes and exercise statements.

LEARNING OBJECTIVES OF THE SUBJECT

Initiate and deepen the knowledge of the preventive discipline "Safety at Work".

Safety is a discipline that aims to prevent the generation of work accidents and the damage they generate, mainly to people, but also to property and the environment. It involves a series of techniques and procedures to ensure, from the job design phase to the actual operation of the production processes or services, that the material working conditions are acceptable and the potential dangers are controlled. For this reason, it is a matter of identifying the dangers or deficiencies of a material, environmental and management nature to assess the risks and based on their possibilities of materialization and their consequences and of course the verification of compliance with the broad legal and regulatory framework. existing, apply the most suitable prevention and protection measures for its elimination or minimization. All this in a process of continuous improvement.

The general objective of the course is to know how to apply the most suitable techniques to ensure that the material safety conditions in the jobs are acceptable and the potential dangers are controlled.

STUDY LOAD

Type	Hours	Percentage
Hours large group	36,0	36.00
Self study	64,0	64.00

Total learning time: 100 h

CONTENTS

-INTRODUCTION TO SECURITY

Description:

HAZARD IDENTIFICATION.

Full-or-part-time: 1h

Theory classes: 1h

-SAFETY INSPECTIONS AND WORK OBSERVATIONS

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-ACCIDENT RATES. ESTADISTIC CONTROL

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-RISKS EVALUATION

Description:

SIMPLIFIED SYSTEMS.

Full-or-part-time: 1h

Theory classes: 1h

-RISK ASSESSMENT II

Description:

COMPLEX SYSTEMS.

Full-or-part-time: 1h

Theory classes: 1h

-ACCIDENT INVESTIGATION

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-WORK PLACES

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-INTRODUCTION TO CHEMICAL AND FIRE RISK

Description:

-

Full-or-part-time: 1h

Theory classes: 1h

-EMERGENCY PLANS

Description:

-

Full-or-part-time: 1h

Theory classes: 1h



-SIGNAGE, SAFETY RULES

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-PROCEDURES FOR THE CONTROL OF ACCIDENT RISKS

Description:

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Full-or-part-time: 1h

Theory classes: 1h

-CERTIFICATION AND USE OF PPE

Description:

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Full-or-part-time: 1h

Theory classes: 1h

GRADING SYSTEM

The final evaluation of the subject will be the result of the continuous evaluation during the semester, taking into account: attendance, attitude in the classes and the resolution of the exercises proposed.

Additionally, there will be three continuous evaluation tests.

BIBLIOGRAPHY

Basic:

- Bestratén Belloví, Manuel; Mitjans Talon, Enric. Seguridad en el trabajo. 2011. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, DL 2011. ISBN 9788474257908.
- Aguilar Franco, Josefa. Riesgo químico : sistemática para la evaluación higiénica. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, DL 2010. ISBN 9788474257861.
- Guía técnica para la integración de la prevención de riesgos laborales en el sistema general de gestión de la empresa [on line]. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, 2008 Available on: <https://www.insst.es/documents/94886/96076/gu%c3%ada+t%c3%a9cnica+integraci%c3%b3n/7a89441a-9ddd-4f14-acfb-656c7d589859>. ISBN 9788474257557.
- Instituto Nacional de Seguridad e Higiene en el Trabajo. Guía técnica sobre señalización de seguridad y salud en el trabajo : Real Decreto 485/1997, de 14 de abril BOE nº 97, de 23 de abril [on line]. Barcelona: Centro Nacional de Condiciones de Trabajo, 200- [Consultation: 29/11/2013]. Available on: <http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/senal.pdf>.
- Instituto Nacional de Seguridad e Higiene en el Trabajo. Guía técnica para la evaluación y prevención de los riesgos relativos a la utilización de los lugares de trabajo : Real Decreto 486/1997, de 14 de abril BOE nº 97, de 23 de abril [on line]. Barcelona: Centro Nacional de Nuevas Tecnologías, 2006 [Consultation: 29/11/2013]. Available on: <http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/lugares.pdf>.
- Instituto Nacional de Seguridad e Higiene en el Trabajo. Guía técnica para la utilización por los trabajadores de equipos de protección individual : Real Decreto 773/1997, de 30 de mayo BOE nº 140, de 12 de junio [on line]. Madrid: Instituto Nacional de Seguridad e higiene en el Trabajo, 2012 [Consultation: 29/11/2013]. Available on: <http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/epi.pdf>.
- Instituto Nacional de Seguridad e Higiene en el Trabajo. Guía técnica para la evaluación y prevención de los riesgos relacionados con los agentes químicos presentes en los lugares de trabajo : Real Decreto 374/2001, de 6 de abril BOE nº 104, de 1 de mayo 2001 [on line]. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, 2013 [Consultation: 29/11/2013]. Available on: http://www.insht.es/InshtWeb/Contenidos/Normativa/GuiasTecnicas/Ficheros/g_AQ.pdf.
- Montes Mayorga, Manuel. Equipos de protección individual (EPI) : Aspectos generales sobre su comercialización, selección y utilización [on line]. Madrid: Instituto Nacional de Seguridad e Higiene en el Trabajo, 2013 [Consultation: 21/03/2014]. Available on: http://www.insht.es/InshtWeb/Contenidos/Documentacion/TextosOnline/EPI/carpeta_epi.pdf. ISBN 9788474257670.

RESOURCES

Other resources:

Various technical prevention notes (NTP).
<http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD> /> Orientative guides for selection and usage of IPEs:
<http://www.insht.es/portal/site/Insht/menuitem.dc6bcc8076d096e6f124b07db5d061ca/?vgnextoid=cfc0c465c5f13110VgnVCM100000dc0ca8c0RCRD&tipo=249984650eca4110VgnVCM100000dc0ca8c0TAXC> /> Chemical risk website:
<http://www.insht.es/portal/site/RiesgosQuimicos/> /> Immediately Dangerous To Life or Health Concentrations (IDLHs):
<http://www.cdc.gov/niosh/idlh/default.html> /> IPE website: <http://www.insht.es/portal/site/Epi/> />