Course guide
310738 - 310738 - Coordination of Health and Safety at Work

Last modified: 17/06/2025

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

Degree: BACHELOR'S DEGREE IN ARCHITECTURAL TECHNOLOGY AND BUILDING CONSTRUCTION (Syllabus 2019). (Compulsory subject).

Academic year: 2025 **ECTS Credits:** 4.5 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: JESÚS ABAD

Others: JESÚS ABAD, MARÍA ESTELA DÍAZ, MERITXELL AMETLLÉ

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
1. FE-17 Ability to schedule and organise the constructive processes, the construction teams, the technical and human means for its execution and maintenance.
2. FE-18 Knowledge of the law of the construction and the contractual relations which occur in the different phases of the construction process, as well as the specific legislation, rules and regulations of the prevention and coordination in matters of safety and occupational health in construction.
3. FE-19 Aptitude to write studies, basic studies and safety and occupational health plans, and coordinate the safety in the project phase or in the construction execution phase.

Transversal:
4. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.
5. ENTREPRENEURSHIP AND INNOVATION - Level 2. Taking initiatives that give rise to opportunities and to new products and solutions, doing so with a vision of process implementation and market understanding, and involving others in projects that have to be carried out.

TEACHING METHODOLOGY

Lecture: Lecturers present concepts, principles and techniques, with the active participation of students.
Problem Based Learning: Lecturers and students resolve exercises and standard problems through specific techniques related to the theoretical contents and principles of the course.
Project Based learning: Students solve complex problems through specific techniques related to the theoretical contents and principles of the course.
Self-study: Students diagnose their learning needs, in collaboration with the lecturers, and plan their own learning process.

LEARNING OBJECTIVES OF THE SUBJECT

The subject expect that the students get the necessary knowledge, so that they will be able to write job security studies and plans and coordinate the activities of the companies in the area of work safety and health in the constructions, both in project and execution phases.

STUDY LOAD

Type	Hours	Percentage
Hours large group	27,0	24.00
Self study	67,5	60.00
Hours medium group	18,0	16.00

Total learning time: 112.5 h

CONTENTS

1.- Basic concepts

Description:
1.1 Current situation of the construction sector
1.2 Work-related injuries
1.3 Accidents: principle of multicausality
1.4 Principles of preventive action
1.5 Risk assessment
1.6 Principles of occupational health and safety management

Related activities:
Midterm exam. Case study on risk assessments.

Full-or-part-time: 30h
Theory classes: 8h
Practical classes: 4h
Self study : 18h

2.- Coordination of business management

Description:
2.1 Topologies of the construction sector
2.2 Legal framework. Normative
2.3 Health and Safety coordination
2.4 Fundamental documentation
2.5 Health and safety management: company vs site

Full-or-part-time: 22h 30m
Theory classes: 6h
Practical classes: 3h
Self study : 13h 30m

3.- Coordination in project stage

Description:
3.1 Coordinator functions at the project stage
3.2 Documents to write at the project stage
3.3 ESS. Concept. Content. Application
3.4 EBSS. Concept. Content. Application

Full-or-part-time: 7h 30m
Theory classes: 2h
Practical classes: 1h
Self study : 4h 30m

4.- ESS and EBSS. Analysis and contents

Description:
4.1 ESS. Descriptive memory
4.2 ESS. Specifications
4.3 ESS. Measurements and budget
4.4 ESS. Blueprints
4.5 EBSS. Descriptive memory
4.6 ESS and EBSS design criteria

Related activities:
Midterm exam. Case study on risk assessments.

Full-or-part-time: 22h 30m
Theory classes: 6h
Practical classes: 3h
Self study : 13h 30m

5.- Coordination at site execution

Description:
5.1 Functions of the coordinator
5.2 The health and safety plan
5.3 Subcontracting during construction
5.4 Documentation in the site execution stage
5.5 Coordination procedures

Related activities:
Final exam. Practical case about roles in coordination.

Full-or-part-time: 30h
Theory classes: 4h
Practical classes: 8h
Self study : 18h

GRADING SYSTEM

The evaluation of the student's achievement will be done considering these parameters:

Final Mark = (0.1 X EP) + (0.1 X EP) + (0.30 X EF) + (0.50 X CC)

EP - Partial Exam
EF - Final Exam
CC - Group Task

There will be no re-evaluation exam as it is considered a continuous assessment subject.

BIBLIOGRAPHY

Basic:
- Mármol Ortuño, Antonio L.. Manual para la elaboración de un estudio de seguridad y salud. Murcia: Colegio oficial de Aparejadores y Arquitectos Técnicos de la región de Murcia, 2004. ISBN 978-8489882218.
- Mínguez Fernández, C ... [et al.]. Planificación y ejecución de la prevención : evaluación de riesgos en construcción. 2a ed. Madrid: Fundación Escuela de la Edificación, 2000. ISBN 9788486957780.
- Moltó, Juan Ignacio. Prevención de riesgos en las obras de construcción. 2a. ed. Madrid: AENOR, 2001. ISBN 9788481432923 .

Complementary:
- Martínez Cuevas, A. Manual práctico para elaboración de estudios de seguridad y salud en obras de edificación. 3a ed. Sevilla: Fundación Cultural del Colegio Oficial de Aparejadores y Arquitectos Técnicos de Sevilla, 2001. ISBN 9788495278425.
- Montoya Melgar, Alfredo. Curso de seguridad y salud en el trabajo. 3a ed. Madrid: Ed. McGraw- Hill, 2004. ISBN 9788480049504 .

RESOURCES

Other resources: