

28720 - Civil Engineering: Health and Safety

Syllabus Information

Academic year: 2023/24

Subject: 28720 - Civil Engineering: Health and Safety

Faculty / School: 175 - Escuela Universitaria Politécnica de La Almunia

Degree: 423 - Bachelor's Degree in Civil Engineering

ECTS: 6.0

Year: 3

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The subject and its expected results respond to the following approaches:

To know and master the occupational health and safety regulations applicable to construction activities.

To this end, it is essential to know how to interpret the regulations in order to know the basic preventive measures to eliminate occupational hazards on construction sites.

Once the theoretical concepts are known, the students will be able to write a Health and Safety Study with a minimum of coherence and to be able to follow up within a basic profile.

These approaches and goals are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement: Objective 3, goals 3.9, 3.d. Objective 4, goals 4.5, 4.7. Objective 8, goal 8.8. Objective 12, target 12.8. Objective 13, target 13.3.

2. Learning results

At the end of this subject, the student will have knowledge and know how to apply the regulations in preventive matters in companies and on construction sites and will be able to detect basic occupational hazards in civil works, more specifically will be able to know and apply the regulations in preventive matters in companies and on construction sites, detect basic occupational hazards in civil works, to promote the development of a critical spirit in the face of unsafe conditions in construction sites, analyze risk situations, obtain basic knowledge of the situations of risk, obtain basic knowledge of prevention management in a civil work, elaborate Safety and Health Studies.

3. Syllabus

The theoretical contents of the subject are classified in two blocks, on the one hand the regulation of security and on the other hand the implementation of security measures.

Part 1. Basic concepts and regulations

1.-Basic Concepts

2.-RD 486/1997

3.-RD 1627/1997

Part 2. Minimum safety conditions

4.-Collective Protections

5.-PPEs

6.-Signaling

7.-Wellness and hygiene facilities

8.- Actions in case of emergency

4. Academic activities

Generic face-to-face activities:

Theoretical classes: The theoretical concepts of the subject will be explained and illustrative practical examples will be developed as support to the theory when necessary.

Practical classes: Exercises and practical cases will be carried out as a complement to the theoretical concepts studied.

Generic non face-to-face activities:

Study and assimilation of the theory presented in the lectures.

Understanding, interpretation and application of the preventive regulations discussed in class.

Job preparation.

Preparation of written tests for continuous assessment and final tests.

The subject consists of 6 ECTS credits, which represents 150 hours of student work in the subject during the semester, i.e. 10 hours per week for 15 weeks. Summary of the indicative time distribution of a teaching week:

Theoretical classes 2 hours / teaching week

Practical classes 2 hours / week

Other activities 6 hours / school week

This distribution is merely indicative, since, depending on the topic covered, a greater or lesser amount of practical content will be necessary. As the theoretical content of the subject progresses, the weight in hours of the practical classes increases.

5. Assessment system

Mixed system: Following the spirit of Bologna, regarding the degree of involvement and continuous work of the student throughout the subject, the evaluation of the subject contemplates the continuous assessment system as the most appropriate. In order to be eligible for this assessment system, the student must attend 80% of the classroom activities of the subject. The continuous assessment system will have the following group of qualifying activities:

1- Individual activities in class and moodle: Active participation both in class and in the moodle forum will contribute with 20% to the final grade of the subject.

2- Proposed work: The students will have to elaborate a Health and Safety Study individually and under a statement and closed index applied to a concrete case of a construction site. The grade for this ESS will be 80% of the final grade of the subject.

Students who do not obtain a minimum grade of 4 out of 10 points in each of the sections will not be eligible for the weighting of the assessment of the activities developed during the term.

Simple system, based on the completion of a global final test and the delivery of the term work:

1- Students must hand in the Health and Safety Study proposed as course work carried out individually and under a closed statement and index applied to a specific case of a construction site before the test.

The grade for this ESS will be 50% of the final grade for the course.

2- Completion of an additional written exercise consisting of a questionnaire with several questions on the content of the subject. The grade of this test will be 50% of the final grade of the subject.

Students who do not obtain a minimum grade of 4 out of 10 points in each of the sections will not be eligible for the weighting of grades.