

68908 - Speciality in Safety in the workplace

Syllabus Information

Academic year: 2023/24

Subject: 68908 - Speciality in Safety in the workplace

Faculty / School: 102 - Facultad de Derecho

Degree: 462 - Master's in Occupational Health and Safety

ECTS: 10.0

Year: 1

Semester: Second semester

Subject type: Optional

Module:

1. General information

Within the objectives of the specialization in Occupational Safety, it is sought that the student, once passed the Safety module of the general part, expand their knowledge about the risks involved in the work activity from a practical approach. According to this approach, they can learn from professionals from different areas of knowledge about the problems and possibilities to solve risk situations in the workplace from the perspective of the specialist in occupational safety.

The specialization in Occupational Safety is, within the specialties of Occupational Risk Prevention, the most generalist, since it touches on aspects of prevention that affect most workers whatever their field of action.

2. Learning results

Upon completion of the subject, the student will be able to:

- Identify hazards in older machines in order to bring them into compliance with current safety regulations.
- Define and identify possible risks and preventive measures specific to the transport of goods.
- Know and know how to apply a self-protection plan according to current regulations.
- Identify possible risks and know how to apply preventive measures on special machines and equipment, such as presses or welding equipment.
- Know and know how to apply, from a regulatory point of view, the requirements for fire safety, including the calculation of fire loads, storage of products and performance of special works.
- Identify possible risks and preventive measures in specific sectors, such as construction, agriculture, livestock, etc.

The knowledge acquired in the specialization in Occupational Safety will allow the student to have a broad vision of the risks that affect most of workers, regardless of their work activity, becoming a fundamental support when learning about the other specialties of Occupational Risk Prevention.

3. Syllabus

- Risk assessment in the company.
- Security audits. Presentation and case study.
- Fires. Management and coordination.
- Calculation of fire loads in industrial establishments.
- Self-protection and emergency plans.
- Safety in maintenance and special works. External services and subcontracting. Case study of external security plans and risk assessment.
- Various industrial risks. Explosive Atmospheres.
- Safety in LV and HV electrical works. Preventive measures and protective equipment.
- Machine Safety. Characteristic risk assessment. Danger of manipulation depending on its use.
- Confined spaces. Noise regulations.

- Construction Safety I. Safety in temporary construction and repair facilities, scaffolding, ladders and platforms. Temporary and mobile works.
- Construction Safety II. Safety in earthmoving and excavation works. Foundations, structures, enclosures and roofs. Risk Assessment in construction works, vehicles and machinery.
- Risk prevention in industrial equipment and installations: welding, boilers, pressure equipment and compressed air.
- Safety in the handling of chemical, toxic and hazardous products. Safety, control and storage standards.
- Major accidents and emergency planning.
- Use of graphic tools for safety signage.
- Management and organization of the Risk Prevention (Safety) department in a company.

4. Academic activities

- Conferences. Presentation of program topics through lectures illustrated with applied examples.
- Self-assessment and learning exercises. In each of the topics that make up the subject, the teacher in charge will prepare a series of questions, specific and of the short development or multiple-choice type, whose purpose is that students assimilate the basic contents of the subject.
- Case studies. The case studies are designed to provide students with practical solutions to the problems involved in the management of occupational safety risks, from risk detection through risk assessment to risk elimination or control.
- Seminars. Several seminars are proposed to deal with specific topics in a monographic way.
- Visits to industrial facilities. They are intended to give a real vision of the risks and preventive measures implemented in a work environment.

5. Assessment system

In order to pass the subject, the student must demonstrate they has acquired the foreseen learning results by the following assessment activities:

- Active participation in theoretical and practical classes. Attendance to the classroom sessions and completion of work and assumptions raised in class will be valued with a maximum of 1 point to be added to the grade obtained in the Learning Exercises.
- Learning Exercises. In each of the topics that make up the subject, the teachers will propose to the students the realization of some exercises based on the practical application of the knowledge transmitted, whose purpose is that the student internalizes the contents of the subject. Each of these exercises will be evaluated from 1 to 10, and the final grade will be obtained from the average of the 80% of the best grades. The assessment will take into account the precision of the answers and the knowledge of the subject.
- Following the regulations of the University of Zaragoza in this regard, a global evaluation test will also be scheduled for those students who decide to opt for this second system.