

IDENTIFICATION DETAILS

Degree:	Architecture		
Scope	Architecture, construction, building and urban planning, and civil engineering		
Faculty/School:	Higher Polytechnic School		
Course:	HAZARD PREVENTION		
Туре:	Optional	ECTS credits:	3
Year:	4	Code:	3764
Teaching period:	Eighth semester		
Subject:	Projects		
Module:	Projectual		
Teaching type:	Classroom-based		
Language:	Spanish		
Total number of student study hours:	75		

SUBJECT DESCRIPTION

This course aims to analyze, study and develop aspects related to occupational safety and risk prevention and their management in the building process, in order to have sufficient knowledge to face and understand the prevention of occupational hazards as an integral part of the building process.

GOAL

Analyze, study and develop aspects related to safety and prevention of occupational hazards and their management in the building process, in order to have sufficient knowledge to face and understand the prevention of occupational hazards as an integral part of the building process.

PRIOR KNOWLEDGE

It is advisable to have passed the subjects of the previous courses. It is advisable to have taken the course of Management, Organization and Control of Works.

COURSE SYLLABUS

Module 1: Basic Concepts on Occupational Safety and Health. Regulatory Framework Work and Health: Occupational Risks. Work-Derived Damages. Working Conditions and Risk Factors. Preventive Techniques 05.- Regulatory Framework in PRL. Rights and Duties in PRL. Module 2: Work accidents. Occupational Accident Statistics. Investigation and registration of accidents. Occupational Accident Statistics. Module 3: Prevention Management and Planning. Prevention management. General Criteria. Prevention management. Specific Criteria Applied to the Construction Sector. Prevention in Spain. Organizations and Entities. Start-up of the work of the work. Documents and previous procedures. Coordination functions during the Preparation of the Project and the Execution of the Work. Basic Health and Safety Study/Study and Health and Safety Plan. Subcontracting in the Construction Sector Module 4: General Conditions of Implementation in Construction Works. Implementation of temporary works and installations. Temporary electrical installation on site. Fires. Affected services. Protections. Module 5: Foundations. Specific risks in building works. Work phases. Preventive and protective measures. Brief summary of the specific risks in building works analyzed by construction phases. Module 6: Health Surveillance, First Aid and First Aid Health surveillance. First Aid and First Aid

EDUCATION ACTIVITIES

FACE-TO-FACE ACTIVITIES:

Expository classes: Presentation of content and activities by the teacher, commentary, recommended reading, and with the participation of students in the debate and resolution of doubts about the topics proposed in class. Carrying out exercises: Solve, individually, on the blackboard or on the table exercises proposed in class to apply the fundamental knowledge received.

Project workshop: Correction in groups of different sizes of the projects that students carry out in the classroom or at home, and they clarify in the light of the exercises of their classmates and the instructions of their teachers.

TUTORIAL:

Personalized: Individual attention to the student with the objective of reviewing and discussing the topics presented in class and clarifying doubts that the student cannot understand in their personal study. Group: Attention to a small group of students who need additional help to follow the subject.

NON-FACE-TO-FACE ACTIVITIES

Theoretical and practical study: Study of the theoretical and practical contents of the program and preparation of recommended readings.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
30 Horas	45 Horas

SKILLS

Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study.

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

Ability to solve problems and to take decisions.

Knowledge of research methods and those pertaining to the preparation of construction projects.

An understanding of the problems involved in structural design, construction and engineering associated with building projects.

An adequate knowledge of industries, organizations, regulations and procedures required in order to turn projects into buildings and to integrate blueprints into planning.

General Skills

Ability to solve problems and to take decisions.

Knowledge of research methods and those pertaining to the preparation of construction projects.

An understanding of the problems involved in structural design, construction and engineering associated with building projects.

An adequate knowledge of industries, organizations, regulations and procedures required in order to turn projects into buildings and to integrate blueprints into planning.

Specific skills

Aptitude for the conception, practice and development of basic and execution projects, sketches and preliminary projects. (T)

Ability to carry out security, evacuation and protection projects in buildings. (T)

Ability to apply urban regulations and ordinances.

LEARNING RESULTS

Analyze the prevention of occupational hazards throughout the construction process in building works.

Assimilate the regulations, responsibilities and basic obligations of professionals related to the prevention of occupational hazards, and their relationship with other agents.

Identify risks and choose technical protection systems to avoid them, more appropriate to the characteristics of the building, from the design phase to the execution of the work, taking into account their technical, economic and legal implications.

Apply the skills acquired in this area during subsequent subjects related to different construction technologies, integrating prevention into all processes.

Have the necessary technical knowledge to develop management processes in subsequent subjects, such as specific project documents for the prevention of occupational hazards.

Establish the necessary criteria for drafting studies, basic studies and occupational safety and health plans, and coordinate during the project phase or in the execution phase of building works.

LEARNING APPRAISAL SYSTEM

SYSTEM FOR EVALUATING THE ACQUISITION OF COMPETENCES AND SYSTEM OF QUALIFICATIONS. The student will demonstrate with their work in the classroom, their partial deliveries, their corrected autonomous exercises, and a general attitude towards their learning if they are qualified in the competencies that they are expected to develop in this module. Ordinary and extraordinary call (10 points):

Practice (2 people): 6.5 points

A4 report: 4 points Class presentation: 2.5 points

Exam (individual): 3.5 points

Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:

a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.

b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.

c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be consulted on the Library website(<u>https://www.ufv.es/gestion-de-la-informacion_biblioteca/</u>).

d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.

2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the <u>Guide for the Responsible Use of Artificial Intelligence in Studies at UFV</u>. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.

3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Pilar Díaz Zazo Occupational Risk Prevention. Occupational Health and Safety (Pilar Díaz Zazo Occupational Risk Prevention. Occupational Health and Safety, Editorial Paraninfo, 2023)

Juan Carlos Rubio Romero and María del Carmen Rubio Gámez Manual for the Coordinator for Safety and Health in Construction Works

(Juan Carlos Rubio Romero and María del Carmen Rubio Gámez Manual for the Coordinator for Safety and Health in Construction Works, Publication of the Labor Foundation for Construction. 2019)