Universidad Zaragoza

Academic Year/course: 2024/25

63288 - The Production Environment of Industrial and Building Processes

Syllabus Information

Academic year: 2024/25
Subject: 63288 - The Production Environment of Industrial and Building Processes
Faculty / School: 107 - Facultad de Educación
Degree: 584 - Master's Degree in Teaching Compulsory Secondary Education
590 - University Master's Degree in Teaching, specializing in Geography and History
591 - Master's Degree in Teaching, specializing in Philosophy
592 - Master's Degree in Teaching, specializing in Business and Economics
593 - Master's Degree in Teaching, specializing in Mathematics
594 - Master's Degree in Teaching, specializing in Technology and Computer Science
595 - Master's Degree in Teaching, specializing in Biology and Geology
596 - Master's Degree in Teaching, specialization in Physics and Chemistry
597 - Master's Degree in Teaching, specializing in Spanish Language and Literature. Latin and Greek
598 - Master's Degree in Teaching, specialization in Foreign Language: French
599 - Master's Degree in Foreign Language Teaching: English
600 - University Master's Degree in Teaching, specializing in Music and Dance
601 - University Master's Degree in Teaching, specializing in Industrial and Construction Processes
602 - University Master's Degree in Teaching, specializing in Administration, Marketing, Tourism, Services to the Community and FOL
603 - Master's Degree in Teaching, specializing in Sanitary, Chemical, Environmental and Health Processes Agri-food
ECTS: 6.0
Year: 1
Semester: Second semester
Subject type: Optional
Module:

1. General information

The subject is compulsory for students of the Industrial Processes and Construction specialization, with 6 ECTS, and will be taken in the second semester of the Master's program . The objective is for students to acquire the concepts and skills necessary to analyse and apply quality, safety, risk prevention and environmental regulations, as well as to assess the importance of their application at the level of an educational centre.

2. Learning results

Knowledge of the productive environment of Industrial and Construction Processes, aims to bring the future Secondary School/ Professional Training teachers closer to the context where they will develop their work activity, analysing aspects that are currently key in the organization of the centres, such as compliance with safety standards, monitoring of quality management systems and critical awareness of environmental issues. The learning results to be achieved are:

1. Identifies, recognizes, applies and optimizes the documentation of quality management systems, as well as the documentation for the management of an industrial process and its control and considers the adaptation to an educational centre.
2. Analyses the regulations and occupational risk protection measures and considers the adaptation to an educational centre.
3. Analyses environmental protection regulations and measures, European directives, circular economy strategy, etc., and proposes the adaptation to an educational centre.

3. Syllabus

The contents of the subject will be the following:

1. Quality management systems: concept, systems, requirements, organization in the centres, practical examples.
2. Documentary management of quality in secondary schools. Practical applications. Review of a quality system implemented in a centre. Visit to a secondary school to see how the quality system has been implemented and updated.
3. Documentary management of security in secondary schools. Practical applications. Safety-related characteristics of educational centres. Review of the security systems implemented in a centre.
4. Environmental management. Environmental protection legislation. Waste management. Implementation of SDGs.
5. Documentary management of environmental management in secondary schools. Practical applications. characteristics of the educational centres related to the environment and waste management.

4. Academic activities

The course has 6 ECTS, which is equivalent to 150 hours of student dedication, distributed:

- Master classes
- Practical classes
- Directed work
- Individual study

Theoretical fundamentals will be explained in the master classes. In the practical classes, cases/works related to the theory covered will be studied, developed and will be presented. In these classes, the development of individual group work is proposed , as well as the development of oral presentations in which the work or cases carried out are exposed and the work is discussed . In addition, lectures will be given by professionals related to the teaching of the subject, as well as visits to entities related to the subject.

5. Assessment system

Types of tests
The student must demonstrate achievement of the intended learning results through the following assessment activities:
Individual or small group completion of three practical/workshops related to the different modules of the subject, following the indications and criteria set by the teacher in each of them in which students demonstrate their competence in the organization, design and development of activities in the area of industrial processes.
Oral presentation of case studies/workshops.

Assessment criteria
The assignments/case studies are intended to achieve continuous formative and additive assessment and that the workload is uniform each week. The following aspects of each paper will be evaluated:
Presentation and structuring.
Application of the contents of the subject.
Clarity and quality of documentation, organization, etc.
Originality of the work
Inclusion and application of the theoretical knowledge acquired in the first four-month period
Results achieved.
Bibliographic references
Each group of students must make an oral presentation of the final work. The above aspects will be valued for the oral presentation and the clarity of the presentation, the ability to motivate the rest of the classmates for the debate, the active participation in the debate and the ability to defend and argue their own ideas and methodologies.
Levels of demand (Grading criteria and requirements to pass the subject)
The work to be performed and its weighting on the overall grade will be as follows:
Work 1. Quality, 35%
Work 2. Safety, 35 %
Work 3. Environment, SDGs, recycling, circular economy, 30%
In each of the papers, the grade will be obtained, in turn, with the following distribution: 70% grade for written work, 30% grade for oral presentation.
In order to pass the subject it will be necessary to obtain a 5 out of 10 in each of the sections.
Students who do not opt for continuous assessment or who do not pass the subject by this procedure will have the right to sit the overall test.

Standards for evaluation

Finally, it must be taken into account that the Regulations of the Norms of Coexistence of the University of Zaragoza will be applicable to the irregularities committed in the evaluation tests by means of academic fraud, as well as the application of article 30 of the Regulations of the Norms of Evaluation of Learning in relation to irregular practices other than academic fraud.

Global test and second call
In compliance with articles 9.1 and 9.3 of the Regulations of the Learning Assessment Standards of the University of Zaragoza, there is a global assessment test, to which all students will be entitled, and which will be held on the date set in the official examination calendar. This test will be on the contests of the subject and its value will be 100% of the grade.

Fifth and sixth calls
For the fifth and sixth call, there will be a global knowledge test in writing, whose value will be 100% of the grade

6. Sustainable Development Goals

4 - Quality Education
5 - Gender Equality
9 - Industry, Innovation and Infrastructure