

## 28637 - Monument Restoration

### Información del Plan Docente

Academic Year	2017/18
Faculty / School	175 - Escuela Universitaria Politécnica de La Almunia
Degree	422 - Bachelor's Degree in Building Engineering
ECTS	5.0
Year	3
Semester	Second semester
Subject Type	Optional
Module	---

### **1.General information**

#### **1.1.Introduction**

#### **1.2.Recommendations to take this course**

#### **1.3.Context and importance of this course in the degree**

#### **1.4.Activities and key dates**

### **2.Learning goals**

#### **2.1.Learning goals**

#### **2.2.Importance of learning goals**

### **3.Aims of the course and competences**

#### **3.1.Aims of the course**

#### **3.2.Competences**

### **4.Assessment (1st and 2nd call)**

#### **4.1.Assessment tasks (description of tasks, marking system and assessment criteria)**

### **5.Methodology, learning tasks, syllabus and resources**

#### **5.1.Methodological overview**

The learning process designed for this subject is based on the following:

Strong teacher/student interaction. This interaction becomes a reality through a division of work and responsibilities between the students and the teacher.

## 28637 - Monument Restoration

For the learning process, the student will have the basic contents available through lectures given by the teacher. These contents will give rise to both the questions considered in the practical sessions, and the work that students must develop autonomously, always monitored by the teacher.

### 5.2.Learning tasks

**The program offered to the student to help achieve the expected results includes the following activities:**

On-site activities:

-Lectures: Theoretical activities carried out mainly through explanation by the teacher, where the theoretical supports of the subject are given, highlighting the basics, structuring them into topics and/or sections, interrelating them. The lecture is supported by the projection of audio visual presentations, including different images and videos. The student, through the educational platform Moodle, is provided with both the notes prepared by the teacher to support lessons and the recommended bibliography.

-Practical Lessons: The weight of these classes is shared between teacher and students. The teacher solves practical cases for teaching purposes. This type of teaching complements the theory shown in the lectures with practical aspects. At times these lessons will be given by guest teachers or experts in the field that is being dealt with at the time.

-Field practical classes, courses and conferences: Visits to historical buildings in the process of renovation or renovated are particularly useful, accompanied by the experts in charge of their management, to visualize the constructive solutions used and deal with real problems. The attendance to courses or conferences related to the subject is also considered, in both the University of Zaragoza and other institutions.

Individual Tutorials: Those carried out giving individual, personalized attention with a teacher from the department. They may be in person (department) or online (Moodle or mail).

Off-site activities:

-Study and understanding of the theory taught in the lectures.

-Understanding and assimilation of the cases solved in the practical classes.

-Preparation of solutions to proposed practice tasks, etc.

-Preparation of the written tests.

Reinforcement activities: Activities that reinforce the basics of the subject are assigned from Moodle. The monitoring of these activities is carried out in a personalized way. This kind of activities provides the teacher with of attitude, effort and performance evaluation of the student learning.

The combination of these learning activities is considered essential for students to be able to achieve the objectives.

## 28637 - Monument Restoration

The subject has 5 ECTS credits, which represents 125 hours of student work in the subject during the semester.

### 5.3.Syllabus

#### T.01. INTRODUCTION

VOCABULARY AND BASIC CONCEPTS

LEGISLATION

#### T.02. HISTORY OF RESTORATION: THE FOUNDATIONS OF CONTEMPORARY THEORY

#### T.03. RESTORATION IN THE CURRENT TIME IN SPAIN

#### T.04. RESTORATION PROJECT

PREVIOUS STUDIES

Historical research

Architectural-constructive survey: traditional techniques and new technologies

Material degradation Study

Structural damage Study

Stratigraphy

CRITERIA AND PROJECT DECISIONS. INTERVENTION TECHNIQUES

### 5.4.Course planning and calendar

#### Schedule sessions

Week	Content
1	Introduction. T.01. Vocabulary and basic concepts
2	T.01. Legislation

## 28637 - Monument Restoration

3	T.01. Legislation
4	T.02. History of restoration
5	T.02. History of restoration
6	T.03. Current restoration in Spain
7	Practical visit
8	T.04. The restoration project. Introduction
9	T.04. Architectural survey
10	T.04. Architectural survey: new technologies
11	T.04. Material degradation study
12	T.04. Structural damage study
13	T.04. Intervention techniques
14	Presentation of case studies
15	Introducing group practices

### 5.5. Bibliography and recommended resources

- Diccionario de arquitectura y construcción / M<sup>a</sup> Soledad Camino Olea ... [et al.] Madrid : Munilla-Lería, 2001
- Teoría e historia de la restauración / Antonio Fernández Alba ... [et al.] Madrid : Munilla-Lería, D.L. 1997
- Tratado de rehabilitación. Tomo 1, Teoría e historia de la rehabilitación / [autores de este tomo, Josep M<sup>a</sup> Adell Argilés ... et al. ; director Juan Monjo Carrió] Madrid : Munilla-Lería, D.L. 1999
- Tratado de rehabilitación. Tomo 2, Metodología de la restauración y de la rehabilitación / [autores Ignacio Arce ... et al. ; director Juan Monjo Carrió] Madrid : Munilla-Lería, 1999
- Tratado de rehabilitación. Tomo 3, Patología y técnicas de intervención : elementos estructurales / [autores Andrés Abasolo ... et al. ; director Juan Monjo Carrió] Madrid : Munilla-Lería, 2008
- Tratado de rehabilitación. Tomo 4, Patología y técnicas de intervención : fachadas y cubiertas / [autores Josep M<sup>a</sup> Adell Argilés ... et al. ; director Juan Monjo Carrió] Madrid : Munilla-Lería, D.L. 1999
- Diccionario técnico Akal de conservación y restauración de bienes culturales : [español-alemán-inglés-italiano-francés] / Lourdes Rico Martínez y Celia Martínez Cabetas (coords.) Madrid : Akal, D.L. 2003
- Calvo Manuel, Ana. Conservación y restauración : materiales, técnicas y procedimientos : de la A a la Z / Ana Calvo . - 1a. ed. Barcelona : Ediciones del Serbal, 1997
- García de Miguel, José María. Tratamiento y conservación de la piedra, el ladrillo y los morteros en monumentos y construcciones / José María García de Miguel Madrid : Cyan, 2009

## 28637 - Monument Restoration

- González-Varas Ibáñez, Ignacio. Conservación de bienes culturales : teoría, historia, principios y normas / Ignacio González-Varas Madrid : Cátedra, D.L. 1999
- Benedicto Salas, Roberto. De las sustituciones de cubiertas en las iglesias del patrimonio monumental / Roberto Benedicto Salas Zaragoza : Institución Fernando El Católico, 2012
- Fernández, Juan Antonio. Patrimonio de la humanidad en España [Texto impreso] / texto y fotos, Juan Antonio Fernández Durán. - 1ª edición Madrid : América Ibérica : IndesMedia, [1997]
- González-Varas Ibáñez, Ignacio. La restauración monumental en España durante el siglo XIX / Ignacio González-Varas Ibáñez Valladolid : Ámbito, 1996
- Muñoz Cosme, Alfonso. La conservación del patrimonio arquitectónico español / Alfonso Muñoz Cosme . - [1a. ed.] Madrid : Dirección General de Bellas Artes y Archivos, 1989
- Ruskin, John. Las siete lámparas de la arquitectura / John Ruskin ; [traducida por Carmen de Burgos] . - 4ª ed. (renovada) Barcelona : Alta Fulla, 2000
- Selección, evaluación y desarrollo de los recursos humanos / Amparo Osca Segovia, editora. Madrid : Sanz Torres, 2006.