



COURSE DATA

DATA SUBJECT

Code: 33875
Name: Techniques and conservation of real estate
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1006 - Degree in History of Art	Facultat de Geografia i Història	2	Second quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1006 - Degree in History of Art	Basic training: instrumental knowledge of History of art	BASIC

COORDINATION

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SUMMARY

Study of the main building materials and their application in architecture, based on a chronological development of the main building elements.

Analysis of major construction techniques of architectural history. Knowledge of the main materials, components and structures built along the main periods from antiquity to modern times

Introduction of basic concepts, such as the wall, support systems, covering and other architectural elements.

The aim is to understand the use of the materials and the building process from the technical point of view. This technical knowledge will develop concepts and criteria for conservation of built heritage

PREVIOUS KNOWLEDGE

RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE



There are no specified enrollment restrictions with other subjects of the curriculum.

OTHER REQUIREMENTS

There are no specified enrolment restrictions with other subjects of the curriculum

COMPETENCES / LEARNING OUTCOMES

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Capacidad de lectura del entorno a partir del análisis, observación y deducción de la información procedente de las obras artísticas producidas a lo largo de la historia.

Capacidad para reunir e interpretar datos relevantes y emitir juicios que incluyan una reflexión sobre aspectos de la producción artística en sus diferentes facetas.

Saber aplicar los conocimientos comprensivos de idiomas modernos, incidiendo en el vocabulario técnico.

Saber aplicar los conocimientos instrumentales aplicados a la Historia del Arte para interpretar y manejar gráficos, fotografías, imagen en movimiento, informática y materiales de la obra de arte.

Saber aplicar los conocimientos sobre documentación, composición de materiales y técnicas constructivas en el estudio y gestión de los bienes artísticos muebles e inmuebles.

Tomar contacto directo con las obras artísticas mediante visitas a los monumentos históricos, museos y exposiciones que muestran al público este tipo de obras.

DESCRIPTION OF CONTENTS

1. Unit 1. The construction techniques of Antiquity

Mud, adobe and brick in Mesopotamia and Egypt. The monumental stone construction. in Egypt, pre-Hellenic cultures and Greece. Support systems and roofs in the ancient world. Roman opus and concrete construction.

2. Unit 2. The construction techniques of the Middle Ages

Early Christian architecture. Tubes, pendentives and domes in the Persian Sassanid and Byzantine cultures. The wall in the Romanesque. Romanesque roofs and vaults. The introduction of the ribbed vault. The gothic wall.



3. Unit 3. The construction techniques of the Modern Age

The recovery of the classical orders. Vaults and domes in the Renaissance and Baroque. Other roof systems: coffered ceilings.

4. Unit 4. Construction techniques from the Industrial Revolution

Iron architecture. The incorporation of new materials and typologies. The birth of modern architecture. The liberation of architectural structures

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	45,00
Classroom practices	15,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	5,00
Individual or group project	25,00
Independent study and work	50,00
Preparation of lessons	10,00
Preparation for assessment activities	0,00
Resolution of case studies	0,00
Total hours	90,00

TEACHING METHODOLOGY

A. Three hours per week of in-class (face-to-face class), distributed as follows:

- 1.- Theoretical classes given by university lecturers (30 hours/course)

These classes will last three hours per week, in which teachers will expose the main aspects of the subject, systematizing contents and providing bibliographical references in order to prepare the final exam. It will be mandatory the preparation of materials, manuals and texts, which will be indicated previously. The practical component will take place in these classes, (may be the commentary and analysis of texts or images relating to the subject)



B. To attend to workshops and complementary activities.

Compulsory attendance to an activity organized by the lecturer, such as museum, collection or monument visits, conferences or monographic seminars. To evaluate this section, a report must be submitted, according to the features and the structure provided by the lecturer prior to the activity. A portfolio must be submitted with all the activities within and outside the classroom for the final evaluation.

C. Non-scheduled tutor sessions.

Students may attend to tutor sessions on the hours designated by the lecturer for resolving doubts and queries related to the subject.

EVALUATION

Evaluation will be based on the following items:

1. Final exam, where knowledge of both theory and practice will be assessed
2. Assistance to theory and practice lessons.
3. Follow-up of theory and practice that will be monitored through case studies and reading assessments.
4. Personal and practical activities
5. Attendance to seminars or complementary activities

In summary:

Written test 60%
Bibliographic readings 10-30%
Personal practical work 10-30%
TOTAL 100%

The grade for the exam to be weighted with the other sections will be a minimum of 4 out of 10

In the extension of the teaching guide, the percentage of evaluation of the bibliographical readings and practical work tests will be specified.

For the second sitting, the personal work may be handed in if it has not been done or has been failed. And the marks of the work done throughout the course will be kept. All the evaluation sections will be recoverable in the second call.



REFERENCES

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- Heyman, J., Teoría, historia y restauración de estructuras de fábrica, CEHOPU, 1995
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