



Universitat de Lleida

# DEGREE CURRICULUM

# **MATERIALS 1**

Academic year 2015-16

## Subject's general information

<b>Subject name</b>	MATERIALS 1
<b>Code</b>	101405
<b>Semester</b>	2nd four-month period. Continuous evaluation.
<b>Typology</b>	Core
<b>ECTS credits</b>	7.5
<b>Theoretical credits</b>	0
<b>Practical credits</b>	0
<b>Department</b>	Enginyeria Agroforestal
<b>Modality</b>	Presencial
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.
<b>Language</b>	Catalan
<b>Degree</b>	Degree in Architectural Technology
<b>E-mail addresses</b>	clabernia@eagrof.udl.cat

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## Subject's extra information

Class attendance is important from the point of view of encourage the discussion, to establish communication, to carry out forums about the presentations or videos and to gather all those issues and information discussed and mentioned in class.

Videos, as well as, presentations and assignments that have been handed in and discussed by the students in class, are part of the global theme of the course and it can be object of evaluation.

This subject is part of the 2nd four-month period of the 1st year of the Architectural Technology degree. Materials 1 belongs to the "Specific training" module, in particular to the "Techniques and technologies of building" subject.

## Learning objectives

see competences

## Competences

### Degree-specific competences

- Knowledge of the chemical characteristics of the materials used in construction, their elaboration processes, the methods of the tests to determine their characteristics, their geological origin, their environmental impact, the recycling and residue management.

### Degree-transversal competences

- Ability for abstraction and critical, logical and mathematical reasoning.

## Subject contents

- Profession evolution
- The materials and construction
- Properties and characteristics
- Legal framework Marc legal
- The rocks
- Land as a support
- Land as the recipient material of the foundations
- The aggregates
- The conglomerates

- The gypsum
- The lime
- The cement
- The metals and the alloys
- The wood

## Methodology

Presentations: theoretical knowledge

Practical sessions: practical knowledge

Discussions and personal opinions: interrelation and judgement

Laboratory practices: practical knowledge

Monographic work in groups: abstraction and research

Work presentation: public and oral communication

## Evaluation

Mid-term exam 1	33	9th week
Mid-term exam 2	33	16th-17th week
Practices	12	Along the year
Monographic work and presentation	20	Lasts weeks of the school year
Attendance	2	Along the year
Retaking test	66	19th-20th week

### ASSESSMENT CRITERIA

- The subject is passed when your mark is above or equal 5.

### EXAM MARKS

- The theoretical exams (Mid-term 1 + Mid-term 2) have a weight of 66% at the final mark.
- The minimum mark on each Mid-term exam must be above or equal 3 to be able to make the average of the subject.

### MARK OF THE PRACTICES

- Along the four-month period different types of practices are going to be make it. Each one of the practices imply the presentation of certain evaluable documents. Practices have a weight of 12% at the final mark.
- The practical mark is not recoverable or improvable by the fulfillment of any type of supplementary activity.

### MONOGRAPHIC WORK MARK

- A monographic work is going to be elaborated about a certain material and it is also going to be presented

with an oral presentation. The work and the oral presentation has a weight of 20% at the final mark.

- The monographic work mark is not recoverable or improvable by the fulfillment of any type of supplementary activity.

#### ATTENDANCE

- The class and practices attendance has a weight of 2% at the final mark.

## Bibliography

Recommended bibliography:

- CTE
- EHE – 08
- RC – 08
- RITE – 07
- PG3 – PG4
- Normas UNE EN
- NLT
- Manual del yeso. Autores varios. Editorial Dossat 2000
- Materiales de construcción. Autor, Antonio Camuñas. Editorial, Guadiana de publicaciones
- Materiales de construcción. Autor, F. Orús. Editorial Dossat SA
- Como debo construir. Autor, Pedro Benavent. Editorial; Bosch, casa editorial
- Elementos de resistencia de materiales. Autor, S. Tomoshenko –D. H. Young. Editorial, Montaner y Simón SA editores
- Tecnología de la construcción. Autor, G. Baud. Editorial, Blume
- Estudio de materiales. Autor, F. Arredondo. Editorial, Instituto Eduardo Torroja
- Geotecnia y cimientos I y II. Autor, J. A. Jiménez Salas y J. L. De Justo Alpañes. Editorial, Rueda
- Excavaciones urbanas y estructuras de contención. Autor, Juan B. Pérez Valcárcel. Editorial, Colegio de Arquitectos de Galicia
- Tecnología y terapéutica del hormigón armado. Autor, Ismael Sirvent Casanova. Editorial, Instituto Técnico de Alicante
- Hormigón armado. Autor, Jimenez Montoya, A. Garcia Meseguer, F. Moran Carre. Editorial, Gustavo Gili Grau