



Course guide

290278 - ARQTERRA3 - Earth Architectures

Last modified: 31/07/2024

Unit in charge: Vallès School of Architecture
Teaching unit: 753 - TA - Department of Architectural Technology.
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Optional subject).
Academic year: 2024 **ECTS Credits:** 3.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Mariana Palumbo
Others: Antonia Navarro, Amanda Rivera, Judit Ramírez

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

This year we are changing the format of Earth Architecture.

We will visit the Empúries site in order to analyze the earthen constructions that have been found there and the different construction techniques that have been used.

The subject will be structured in 8 two-hour fortnightly sessions (Monday from 4pm to 6pm) and a weekend visit to Empúries in which we will carry out an on-site survey of the archaeological remains.

CONTENTS

Contents

Description:

The content of the subject will be structured as follows:

- S1. Introduction: from matter to architecture and the role of land in the decarbonisation of the sector
- S2. Empúries, the site, the use of the land and what we are going to do there
- S3. Earth matter
- S4. The Carazas test, the liquid and plastic limits and their importance.
- S5. Building systems with soil.
- S6. Construction systems with floor and preparation of the visit.

Visit to Empúries. Lifting by groups.

- S7. Review of lifts.
- S8. Presentations and final review.

Full-or-part-time: 30h
Laboratory classes: 30h



GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Houben, Hugo; Guillaud, Hubert. *Traité de construction en terre*. Marseille: Parentheses, 2006. ISBN 9782863640418.
- Frey, Pierre. *Learning from vernacular : towards a new vernacular architecture*. Arles: Actes Sud, 2010. ISBN 9782742793877.
- Olivier, Paul. *Dwellings : the house across the world*. Phaidon Press Ltd, 1987. ISBN 9780714824437.
- Olivier, Paul. *Encyclopedia of vernacular architecture of the world : cultures and habitats*. Cambridge: Cambridge University Press, 1997. ISBN 9780521564229.
- Cohen, Jean Louis; Dethier, Jean. *Arquitecturas de tierra : el arte de construir con tierra : pasado, presente y porvenir*. Vallvidrera, Barcelona: Blume, 2019. ISBN 9788417757656.
- Fontaine, Laetitia; Van Damme, Henri; Houben, Hugo; Doat, Patrice; Anger, Romain. *Bâtir en terre : du grain de sable à l'architecture*. Paris: Belin : Cité des sciences et de l'industrie, cop. 2009. ISBN 9782701152042.
- Fabri, Antonin [et al.]. *Testing and Characterisation of Earth-based Building Materials and Elements* [on line]. Cham: Springer International Publishing AG, 2022 [Consultation: 17/09/2024]. Available on: <https://doi.org/10.1007/978-3-030-83297-1>. ISBN 9783030832971.
- Joffroy, Thierry; Gandreau, David; Delboy, Leticia. *Patrimoine mondial : inventaire de l'architecture de terre* [on line]. Grenoble: CRAterre-ENSAG, 2012 [Consultation: 17/09/2024]. Available on: <https://doi.org/10.58079/nahu>. ISBN 9782906901698.