



Course guide

390248 - CONS2 - Construction II

Last modified: 06/07/2023

Unit in charge: Barcelona School of Agri-Food and Biosystems Engineering
Teaching unit: 740 - DUTP - Department of Urbanism, Territory and Landscape.

Degree: BACHELOR'S DEGREE IN LANDSCAPE ARCHITECTURE (Syllabus 2019). (Compulsory subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: María del Mar Pérez Cambra

Others: profesor del Departamento de Urbanismo a determinar.

PRIOR SKILLS

Good understanding of space, minimum ability to represent graphically or by hand or by computer.
Tenacity, effort capacity, listening ability and classes retention and attention during the explanations during the lectures.

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE-PS-02. (ENG) Aplicar los conocimientos adquiridos en las enseñanzas que permitan la planificación del espacio abierto urbano.
CE-PS-03. (ENG) Interpretar objetivos generales de la sociedad, convertidos en objetivos de los principios de diseño paisajístico, estrategias y metodologías.
CE-PS-04. (ENG) Desarrollar un talento creativo, de una sensibilidad a la forma, color y textura; La capacidad para generar conceptos en el espacio y el tiempo; Para evocar, proyectar y transferir imágenes.
CE-PS-15. (ENG) Elegir y emplear los materiales y las técnicas constructivas adecuadas para la ejecución del proyecto de paisaje.

General:

CG2. (ENG) Recurrir a conocimientos en materias básicas, científicas y tecnológicas adquiridos en los estudios que permitan un aprendizaje continuo, así como adaptarse a nuevas situaciones o entornos cambiantes.

Transversal:

CT2. SUSTAINABILITY AND SOCIAL COMMITMENT: Being aware of and understanding the complexity of the economic and social phenomena typical of a welfare society, and being able to relate social welfare to globalisation and sustainability and to use technique, technology, economics and sustainability in a balanced and compatible manner.

CT4. (ENG) Trabajo en equipo. Ser capaz de trabajar como miembro de un equipo interdisciplinar, ya sea como un miembro más o realizando tareas de dirección, con la finalidad de contribuir a desarrollar proyectos con pragmatismo y sentido de la responsabilidad, asumiendo compromisos teniendo en cuenta los recursos disponibles.

TEACHING METHODOLOGY

The subject above all is practical. It is divided into two parts: the first one where the green strategies related to pre-existing construction systems will be worked on in a first approximation, and the second one where the rest of the construction systems that allow the construction of the landscape will be seen (four hours weekly).

There will be a theoretical explanation of the construction systems and there will also be visits to see them built as well as conferences related to these systems.

.Team practices will be carried out on the theoretical concepts explained.



LEARNING OBJECTIVES OF THE SUBJECT

At the end of the semester, the student will know how to build the landscape with the basic constructive systems in different ways: three-dimensionally, two-dimensionally and through visual experience. Amongst all of them they will build their own "landscape construction atlas" that will be useful for their landscape projects and that will be implemented to some projects.

STUDY LOAD

Type	Hours	Percentage
Hours small group	20,0	13.33
Hours large group	40,0	26.67
Self study	90,0	60.00

Total learning time: 150 h

CONTENTS

LANDSCAPE CONSTRUCTION

Description:

To learn the basic systems that make up the landscape and to carry out practices where you can develop the knowledge learned in class.

Specific objectives:

Basic concepts in the landscape construction

PART I:

A. Green roofs.

B. Green facades.

PART II: "ground level".

1. The terrain.
2. Selection criteria and sizing of pavements.
3. Ramps and stairs.
4. Fences.
5. Water: containment and transport.
6. Basic parameters of comfort in the landscape.
7. Resources in the construction of the landscape.

Related activities:

PRACTICES:

Advanced level: constructive analysis of a project.

VISITS:

Visit: Initial level: eye and landscape.

Visit: More initiated level: the landscape as a collector and manager of resources.

Lectures on landscape construction systems

Related competencies :

CG2. (ENG) Recurrir a conocimientos en materias básicas, científicas y tecnológicas adquiridos en los estudios que permitan un aprendizaje continuo, así como adaptarse a nuevas situaciones o entornos cambiantes.

CE-PS-15. (ENG) Elegir y emplear los materiales y las técnicas constructivas adecuadas para la ejecución del proyecto de paisaje.

CE-PS-02. (ENG) Aplicar los conocimientos adquiridos en las enseñanzas que permitan la planificación del espacio abierto urbano.

Full-or-part-time: 47h 27m

Theory classes: 14h 57m

Practical classes: 32h 30m



GRADING SYSTEM

The assessment is made up of 40% of the part of the first part of the subject and will be an evaluation of the practices carried out in the workshop.

The other 60% of the note that will be of the second part of the subject, where the rest of the construction systems will be worked on. This 60% will be made up of 40% of practices and 20% of a theoretical exam of the most relevant construction systems.

Thus, the valuation is as:

$$N = N1 * 0.40 + N2 * 0.20 + N3 * 0.40$$

N1= Landscape construction practices on pre-existing construction systems (Urban Planning Department)

N2= examination of construction systems that build the landscape (Department of Technology)

N3= practices of constructive systems that build the landscape (Department of Technology).

EXAMINATION RULES.

The assessment is made up of 40% of the part of the subject that will deal with the construction of the landscape on pre-existing construction systems which will be an evaluation of the practices carried out in the workshop.

The other 60% of the note that will be from the block where the rest of the construction systems will be worked on. This 60% will be made up of 40% of practices and 20% of a theoretical exam of the most relevant construction systems.

BIBLIOGRAPHY

Basic:

- Zimmermann, Astrid. Construir el paisaje : materiales, técnicas y componentes estructurales. Basilea: Birkhäuser, cop. 2011. ISBN 9783034606943.
- Pérez Cambra, María del Mar. Construcción sostenible de espacio público [Recurs electrònic] [on line]. Barcelona: Universitat Politècnica de Catalunya. Iniciativa Digital Politécnica, 2015 [Consultation: 22/09/2021]. Available on: <http://hdl.handle.net/2099.3/36868>. ISBN 9788498805161.
- Alabern i Valentí, Eduard; Guilemany Casademont, Carles. Execució inspecció i control d'obres d'urbanització : cadència d'execució i programes de control. Barcelona: [s.n.], DL 1988. ISBN 8440434421.
- González Moreno-Navarro, José Luis; Casals, Albert; Falcones, Alejandro. Les Claus per a construir l'arquitectura. 2a ed. rev. conforme al CTE. [Barcelona]: Generalitat de Catalunya, Departament de Política Territorial i Obres Públiques : Gustavo Gili, 2009. ISBN 9788425223150.
- Pérez Luque, Gabriel; González i Barroso, Josep Maria. Façanes vegetades [Recurs electrònic] : estudi del seu potencial com a sistema passiu d'estalvi d'energia, en clima mediterrani continental [on line]. 2010 [Consultation: 22/09/2021]. Available on: <http://hdl.handle.net/2117/93456>. ISBN 9788469370667.
- Ochoa de la Torre, José Manuel. La Vegetación como instrumento para el control microclimático [on line]. Universitat Politècnica de Catalunya, 1999 [Consultation: 22/09/2021]. Available on: <http://hdl.handle.net/10803/6124>.
- Tectónica nº 30: Espacios Exteriores: Monografías de arquitectura, tecnología y construcción [on line]. Madrid: ATC ediciones, 1996- Available on: <https://dialnet.unirioja.es/servlet/revista?codigo=5782>.- A+t: Strategy: Strategy Public [on line]. Vitoria: a+t ediciones : Colegio Oficial de Arquitectos Vasco-Navarro, 1992- [Consultation: 22/09/2021]. Available on: <http://dialnet.unirioja.es/servlet/revista?codigo=8922>.- A+t: Strategy: Strategy and tactics in public space [on line]. Vitoria: a+t ediciones : Colegio Oficial de Arquitectos Vasco-Navarro, 1992- [Consultation: 22/09/2021]. Available on: <http://dialnet.unirioja.es/servlet/revista?codigo=8922>.- A+t: Strategy space. Vitoria: a+t ediciones : Colegio Oficial de Arquitectos Vasco-Navarro, 1992-. ISBN 11326409.
- Paisea.
- Arquitectura y paisaje. Detail no .50,

RESOURCES

Audiovisual material:

- Nombre recurso. Resource

Other resources:

They'll be uploaded in Atenea.