Course guides
310754 - 310754 - Circular Architecture

Unit in charge: Barcelona School of Building Construction
Teaching unit: 753 - TA - Department of Architectural Technology.

Degree: BACHELOR’S DEGREE IN ARCHITECTURAL TECHNOLOGY AND BUILDING CONSTRUCTION (Syllabus 2019).
(Static subject).

Academic year: 2021 ECTS Credits: 3.0 Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Paris Viviana, Oriol
Others: Alfaro Garrido, Licinio José
Caballero Mestres, Antonio

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:
FB-05. FB-5 Knowledge of the theoretical basis and the basic principles applied to the construction, of the fluid mechanics, the hydraulics, the electricity and electromagnetism, the calorimetry and thermal comfort, and the acoustics.
FE-04. FE-4 Knowledge of the materials and traditional or prefabricated construction systems used in construction, their varieties and physical and mechanical features which define them.
FE-07. FE-7 Ability to identify the constructive elements and systems, define its function and compatibility, and its implementation to construction in the construction process. Plan and solve constructive details.
FE-05. FE-5 Ability to adapt the construction materials to the typology and use of the building, manage and run the receipt and quality control of the materials, its implementation in the construction, the control of execution of the construction units and the realization of trials and final tests.

Transversal:
02 SCS N3. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 3. Taking social, economic and environmental factors into account in the application of solutions. Undertaking projects that tie in with human development and sustainability.
04 COE N3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
07 AAT. SELF-DIRECTED LEARNING. Detecting gaps in one's knowledge and overcoming them through critical self-appraisal. Choosing the best path for broadening one's knowledge.
05 TEQ. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.
06 URI. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

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STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours large group</td>
<td>30,0</td>
<td>40.00</td>
</tr>
<tr>
<td>Self study</td>
<td>45,0</td>
<td>60.00</td>
</tr>
</tbody>
</table>

Total learning time: 75 h

CONTENTS

**title english**

Description:
content english

Full-or-part-time: 1h
Practical classes: 1h

**title english**

Description:
content english

Full-or-part-time: 9h 40m
Theory classes: 4h 50m
Guided activities: 4h 50m

**title english**

Description:
content english

Full-or-part-time: 8h 40m
Theory classes: 4h 20m
Guided activities: 4h 20m

**title english**

Description:
content english

Full-or-part-time: 6h 40m
Theory classes: 3h 20m
Guided activities: 3h 20m
title english

Description:
content english

Full-or-part-time: 4h
Theory classes: 2h
Guided activities: 2h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:
- Serra Florensa, Rafael. Arquitectura y climas.
- Victor Olgyay. Arquitectura y Climas.
- Ray C. Anderson. Mid-course Correction: Toward a Sustainable Enterprise :The Interface Model.
- Dunnett, Nigel, y Nöel Kingsbury. Toits et murs végétaux.
- Andrea Deplazes. Construir la arquitectura.
- Beatriz Garzon. Arquitectura Bioclimatica.
- Michael Braungart, William McDonough. Cradle to Cradle: Remaking the Way We Make Things.
- Peter Rice. Un ingeniero imagina.
- Michael Wassouf. De la casa pasiva al estándar Passivhaus.
- Michael Braungart, William McDonough. The Upcycle: Beyond Sustainability--Designing for Abundance.