Universidad Zaragoza

Year : 2019/20

30716 - Architectural Graphic Expression 5

Syllabus Information

Academic Year: 2019/20
Subject: 30716 - Architectural Graphic Expression 5
Faculty / School: 110 -

Degree: 470 - Bachelor's Degree in Architecture Studies

ECTS: 6.0
Year: 2
Semester: Second semester
Subject Type: Basic Education
Module:

1.General information

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

3.1.Assessment tasks (description of tasks, marking system and assessment criteria)

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The learning process that has been designed for this subject is based on the following:

In the explanation of the representation of architectural elements, in two dimensions, three dimensions and virtual reality, so that later the student, in a directed practice, applies them, understands them and is able, within limits, to establish their own system of presentation, using universal codes to exchange architectural information.

4.2.Learning tasks

The program offered to the student to help him achieve the expected results includes the following activities ...

The course is structured in theoretical sessions of 1 hour, and practical workshop sessions of 3 hours, along all the weeks of the semester. In the theoretical sessions the necessary contents are explained so that the students can develop their course work.

Students must form small teams of work. They must choose or be provided with a building, relevant for its design, program, author, etc., from which they can obtain sufficient documentation for their representation. The choice of the building will be discussed with the teacher in the first workshop sessions, to decide its suitability for the exercise.

4.3.Syllabus

1.- Introduction BIM-interoperability.

2.- Floors / layers / work units. Screen control / selection. 2D Drawing/ Edit commands

3.- Pens / frames / text / dimensions-import / export of drawings/ 3D Navigation

4.- Construction elements: wall / slab / roof / pillar / beam / mesh / zones / curtain wall / complex structure

5.- Parametric objects: door / window / skylight / staircase / objects

6.- Virtual building management/ Printing, plotting and publication

7.- Advanced tools

8.- Photo rendering / retouching

4.4.Course planning and calendar

The subject is developed with two types of activities:

1.- Theoretical sessions where the philosophy and management of BIM technology is explained, as well as the rendering process.

2.- Practical sessions aimed at the assimilation and management of the theoretical knowledge imparted and applied to the course work.

The course work is delivered on the date scheduled by the management for the evaluation.

4.5.Bibliography and recommended resources

- Ching, Frank. Manual de dibujo arquitectónico / Francis D. K. Ching ; traducción de Marta Rojals . - 4ª ed. rev. y amp. Barcelona : Gustavo Gili, D.L. 2013
- Ching, Frank. Arquitectura : forma, espacio y orden / Francis D. K. Ching ; [versión castellana de Santiago Castán] . - 3ª ed. rev. y act. Barcelona : Gustavo Gili, D.L. 2010
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- Montes Serrano, Carlos. Representación y análisis formal : lecciones de análisis de formas / Carlos Montes Serrano Valladolid : Universidad de Valladolid, Secretariado de Publicaciones, D.L. 1992
- Cecchi, Roberta. ArchiCAD 10: Guia de Uso / Roberta Cecchi. Edicions Renat, 2007
- Simmons, Thomas M.. Graphisoft ArchiCAD Tutorial Paso a Paso / Thomas M. Simmons. - 1st edition Graphisoft R&D Rt, 2002
- Dunn, Nick. Proyecto y construcción digital en arquitectura / Nick Dunn ; [traducción, Cristóbal Barber Casasnovas] Barcelona : Blume, 2012