Universidad Zaragoza

Academic Year/course: 2021/22

30708 - Architectural graphic expression 4

Syllabus Information

Academic Year: 2021/22
Subject: 30708 - Architectural graphic expression 4
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 470 - Bachelor's Degree in Architecture Studies
ECTS: 6.0
Year: 1
Semester: Second semester
Subject Type: Basic Education
Module:

1. General information

1.1. Aims of the course

The main aim of the course is to represent and analyze architectural works or urban environments using appropriate graphic means.

The course is developed around concepts applicable to architectural works that can be experienced physically or know through planimetry.

Of particular interest is the mastery of the techniques developed during the course, focused on color drawing; the model; and the treatment of photography and digital collage / photomontage.

It is a subject whose contents assessable by themselves do not yet give direct abilities to the student to contribute to the achievement of the 2030 Agenda, however they are essential to base the subsequent knowledge of the rest of the degree that is more directly related to the SDGs and therefore the 2030 Agenda.

1.2. Context and importance of this course in the degree

It is taught in the second semester of the first course of the Degree in Architecture Studies, as a continuation of the Architectural Graphic Expression 2 subject and in parallel to Architectural Graphic Expression 3.

It has the vocation to provide the student with the necessary skills to represent, interpret and analyze architectural works and spaces, as basic preparation to face the architectural project in the following courses.

1.3. Recommendations to take this course

The student should have a basic knowledge of drawing.

Keep in mind that in these types of subjects, a high percentage of students face a new language. They are used to an educational tradition in which articulated language, grammatical logic, memory, mathematical aspects prevail, and in short, those skills typical of the left hemisphere of the brain. In this area, the right hemisphere also plays a major role, where sensations, emotions are articulated and artistic skills such as music and painting reside. However, the fact that students, in general, have not been educated in the development of this type of skills, does not prevent the results from being as satisfactory as in any other traditional subject.

2. Learning goals

2.1. Competences

The student will be more competent to ...

Students will demonstrate that they understand knowledge in an area of ??study that starts at the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that involve knowledge from at the forefront of their field of study. C.B.G.1

Students will know how to apply their knowledge to their work or vocation in a professional way and will possess the competences that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within the area of ??architecture. C.B.G.2

Understand the relationships between people and buildings and between them and their environment, as well as the need to relate buildings and the spaces between them based on needs and the human scale. C.G.G.7.

Ability to combine general and specialized knowledge of architecture to generate innovative and competitive proposals in professional activity. C.T.2

Ability to communicate and transmit knowledge, abilities and skills. C.T.4

Aptitude for: Applying graphic procedures for the representation of spaces and objects. (T) C.E. 1.OB

Ability to conceive and represent the visual attributes of objects and to master proportion and drawing techniques
including IT. (T) C.E. 2.OB

Adequate knowledge and applied to architecture and urban planning of: Spatial representation systems. EC. 3.OB

Adequate knowledge, applied to architecture and urban planning, of: The analysis and theory of form and the laws of
visual perception. EC. 4.OB

Adequate knowledge, applied to architecture and urban planning, of: Graphic surveying techniques in all its phases, from drawing notes to scientific restitution. EC. 6.OB

2.2. Learning goals

The student is able to draw on a physical support, freehand, a sketch to color or stain of an architectural space, defining the volumes and the shadows, properly fitted, proportioned and fugitive.

The student is able to define a space or the generating idea of an architectural work by making a model.

The student knows and masters the techniques of digital image processing.

The student applies, regardless of the medium used, own criteria of organization, rigor, synthesis, aesthetics, etc. in the presentation of graphic documents.

2.3. Importance of learning goals

Learning in the Architectural Graphic Expression 4 course is essential in the training of the architect, since it provides the student with the necessary graphic tools so that they can develop and express their ideas and knowledge of architectural space. The intellectual process and the skills that the student acquires allow him to develop his spatial capacity, necessary to approach the most modern techniques of representation through computer means, and to master the graphic language, basic for his academic and professional life.

By providing control of the graphic medium, the subject allows to strengthen both thought and expression processes and comprehension. The architect is trained and is in constant contact with the work of the masters and leading figures on the international contemporary scene, whose work is published in books, magazines and web resources through graphic means that he must understand and internalize. Finally, in professional practice, the exchange of graphic material is essential for the performance of a work as interdisciplinary as that of architecture.

3. Assessment (1st and 2nd call)

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

EVALUATION CRITERIA

The student must demonstrate that they have achieved the expected learning outcomes based on the following criteria
evaluation:

Interpretive and analytical drawing:
- The interpretation and analysis of the proposed work or space.
- The framing and composition of the dominant forms.
- The rigor in the proportions and the execution of the perspective.
- The expression and assessment of the stroke and the line.
- The rigor in the execution of the hue, saturation and luminosity of the color.
- The rigor in the execution of lights and shadows.
- The expressiveness of color spots, lights and shadows.
- The quality and feel of the drawing.

Model:
- The interpretation and analysis of the proposed work or space.
- The adaptation of the material to the scale, type of representation and technique chosen.

- The rigor in the proportions and the reading of each element.
- The rigor in technical development and material execution.
- The quality and feel of the model.

Digital treatment of photography and collage / photomontage:
- The interpretation and analysis of the proposed work or space.
- The rigor in the adjustment and editing techniques carried out.
- The perception of improvement in the treatment of photography.
- The resources used to compose a digital image.
- The quality and feel of digital collage / photomontage.

EVALUATION ACTIVITIES

There are two ways to study the subject:

By course

The evaluation is carried out by:

- Activities with the supervision of teachers during school hours and supervised outside the classroom, conveniently
scheduled.

- Final test in several sessions in which various exercises will be performed according to the activities carried out in the
quarter.

The activities to be carried out during school hours involve interpretive and analytical drawing of architectural spaces. The activities outside the workshop, in addition to drawing, consist of making models and treatment of photography and digital collage / photomontage.

The evaluation of the activities prioritizes the evolution of the student.

These activities represent 60% of the final grade for the course.

The final assessment task consists of an interpretive and analytical drawing in natural color and based on planimetry.
It represents 40% of the final grade for the course.

Attendance at all practices and delivery of all work proposed in each of the three assessment blocks is compulsory. Failure to attend any of the sessions must be duly justified. In that case, the work corresponding to said session must be recovered outside of school hours and delivered in the following weeks (in any case, before the final test).
Likewise, attending classes is essential to understand the concepts and know the criteria with which the work must be carried out.

Global assessment task

The student can demonstrate his knowledge in a global assessment test, which will be established in the academic calendar. This task consists of demonstrating the master of all the concepts and skills that make up the learning results of the course.

It is different from the final task in the previous section and represents 100% of the grade for the course.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as theory sessions, practice sessions, assignments, visits, and tutorials,

Expresión Gráfica Arquitectónica 4 is an introduction to the drawing and the study of architectural space, which provides the student with a solid base to graphically represent and analyze architectural works or urban environments. It is, therefore, a course of basic training and it is considered necessary for the student to proceed with courses of the following academic years that are supported by the graphic language.

The activities proposed, both in the teaching hours and outside of them, are practices related to the analytical representation of forms and spaces.

In the course Expresión Gráfica Arquitectónica 2 the main objectives are the expression and analytical representation using line and shadow. In this course, as a continuity of the previous one, we work with the analytical representation of architecture taken from natural spaces and plans, through colored drawing, models

and digital treatment of photography and collage/photomontage.

4.2. Learning tasks

- Interpretive and analytical drawing
Proposed works or spaces will be analyzed and interpreted, working: the framing and composition of the dominant forms; the proportions and execution of the perspective; the expression and evaluation of the stroke and the line; execution of hue, saturation and lightness of color; the execution of light and shadow; the expressiveness of the treatment and the quality and feel of the drawing.

- Model
Proposed works or spaces will be analyzed and interpreted, working: the adaptation of the material to the scale, type of representation and technique chosen; the proportions and the reading of each element; the technical development and material execution and the quality and feel of the model.

- Digital photography and collage / photomontage
Proposed works or spaces will be analyzed and interpreted, working on: the adjustment and editing techniques carried out; the perception of improvement in the treatment of photography; the resources used to compose a digital image and the quality and feel of digital collage / photomontage.

4.3. Syllabus

The syllabus contains theoretical sessions and practical activities in and out of the classroom.

In the theoretical sessions the foundations of each of the blocks that make up the subject are exposed and are directly linked to the practices that are developed in parallel.

The practical sessions, with a workshop structure, take place in the classroom, to learn how to use the different techniques and work with emblematic works of modern and contemporary architecture. The advice of the student by the teachers in the classes is really useful, because it takes place at the same time and in the physical space where the work is being carried out, being able to solve fundamental questions such as the choice of point of view, the fit of the drawing, leaks , the proportions or the treatment. The practices carried out are delivered at the end of each session and are graded weekly by the teachers of the subject to know the evolution of the students and keep them informed.

The student also has the possibility of complementing their training with tutorials carried out by the teachers in the department at the time indicated at the beginning of the semester.

The work to be done outside school hours is proposed with the aim of reinforcing the content provided in the theoretical sessions and requires more time for reflection. This work, directed by the teacher, requires the time that the student deems necessary and must be carried out continuously, since a discipline such as this, in which the student's intellectual evolution goes hand in hand with the evolution of their manual skills, it cannot accumulate in the vicinity of the evaluation, but requires continuous effort.
These works are explained in detail in the course program and are delivered throughout the semester on the dates indicated in the course scheduling calendar.

Complementary activities are also proposed that mainly include trips, visits to exhibitions and attendance at conferences and talks.

The main work techniques that are used in a complementary way throughout the semester are:
- Drawing in pencil or ink with color, using watercolor as the base technique.
- Model.
- Model photography and digital collage / photomontage.

4.4. Course planning and calendar

The main objective of Architectural Graphic Expression 4 is for the student to be able to represent and analyze architectural works or urban environments through graphic means, starting from three general lines that articulate the course:

Depth

Composition by parallel planes that generate the sensation of the space field. The rudimentary representation of the primitives appears linked to the surface, but the art, once it has taken over the foreshortening and the deep scene
recognizes the surface as a shape that can be overridden for depth reasons.

Resources to achieve this are:

- Linear rhythms

- Departure plans

Space

Representation of bounded spaces with classic resources that recreate its atmosphere, such as the treatment of the boundary planes through their materiality and the incidence of light. Perceptual invariants provide us with how much information about the external world we may need. Gibson has detailed some of these invariants, among which stands out as priorities for perception, the contour of objects and gradients of color, texture and luminosity.

It is mainly worked with:

- Boundary plans

Space and idea

Representation of transparency in architecture, of the connection of spaces with each other and with the environment. The interest of transparency lies in that it favors the creation of space and allows to go from the representation of the material phenomenon -transparency- to the creation of the medium -space-.

Graphic and volumetric synthesis of this idea.

It is mainly worked with:

- Transparent plans

The work on these concepts that articulate the course is done by case studies that are proposed for direct application with the object of establishing knowledge and causing reflection on it.

Both types of work are carried out in parallel, both in class practices and in deliveries to be made outside the classroom.

4.5. Bibliography and recommended resources

RECOMMENDED RESOURCES

Drawing

Ink drawing

- Fountain pen | Calibrated marker Staedtler [thickness 0,8 mm.]

Pencil drawing

- Pencils of different hardness and thickness [hardness 2B-4B and thickness 2mm.]
- Soft rubber
- Bloc Esbozo Studio Guarro [Din A-3, 90 gr./m^2, 100 sheets]
- Bloc XL Canson [Din A-4, 160 gr./m^2, 50 sheets]

Watercolor drawing

- Watercolors [recomended 12 colors, Schminke]
- Paintbrushes [recomended n. 6-12-20, Winsor&Newton or Rembrandt]
- Cloths
- Containers to mix the colors
- Paper Guarro, 60% cotton, middle roughness [Din A-3, 240 gr./m^2]
- Bloc XL Canson [Din A-4, 160 gr./m^2, 50 hojas, microperforado]

Model

Large format model

- Cardboard, Wood, acetate...

Synthetic model

- Chalks, cardboard, textured cardboard, wood, acetate, methacrylate, metal...

Digital photography and collage/photomontage

- Camera
- Computer. Adobe Photoshop

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