

Academic Year/course: 2022/23

## 30708 - Architectural graphic expression 4

### Syllabus Information

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**Academic Year:** 2022/23

**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 known 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 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 processing of image:

- 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:

## 1. By course

### - Practices and supervised activities

The practices involve interpretive and analytical drawing in color of architectural spaces.

The supervised activities, in addition to drawing, consist of making models and processing photography and digital collage/photomontage.

Attendance at all practices and delivery of all proposed work is mandatory. Failure to attend any of the sessions must be duly justified. In that case, the work corresponding to said session must be made up outside of class hours and delivered in the following weeks (in any case, before the final test).

Likewise, attendance at classes is essential to understand the concepts and know the criteria with which the work must be developed.

The qualification of these activities will be made from the letter A to the letter E, with the maximum qualification being A and the passing being in the letter C. The assessment of the activities acquires more importance as the course develops, with which the evolution of the student prevails.

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

### - Final task

It consists of interpretive and analytical drawing in color of architectural spaces in various exercises according to the activities carried out in the semester. The task will consist of two parts and its qualification will be numerical from 0 to 10. The minimum passing grade is 5.

It represents 40% of the final grade for the subject.

To pass the subject, at least one of the two parts of the final task must be passed, that is, a minimum grade of 5 must be obtained in at least in one of the two parts of the task.

## 2. Global assessment task

The student has the right to demonstrate knowledge of it in a global evaluation test, which will be set in the academic calendar. This test consists of demonstrating that you have mastery of all the concepts and skills that make up the learning outcomes of the course.

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

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

Architectural Graphic Expression 4 is an introduction to drawing and the study of architectural space, which provides the student with a solid foundation for graphically representing and analyzing architectural works or urban environments. For this reason, it is a basic training subject and is considered necessary for the student to face subjects in higher courses, which are based on graphic language.

The activities that are proposed, both during class hours and outside them, are practices related to the analytical representation of shapes and environments.

In the subject Architectural Graphic Expression 2, work is done with expression and analytical representation in line and shadow. In this subject, a continuation of the previous one, we work with the analytical representation of architectural spaces through pencil or ink and color drawing, models and digital process of the image.

### 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 process of the image

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 feeling of digital collage / photomontage.

### 4.3. Syllabus

The syllabus contains theoretical sessions, practical sessions in the classroom and outside of it, and critical sessions.

**THEORETICAL SESSIONS.** The fundamentals of each of the blocks that make up the subject are exposed and are directly linked to the practices that are developed in parallel.

**PRACTICAL SESSIONS.** With a workshop structure, they take place both in the classroom and outside it in external practices, to learn the handling of the different techniques and work with emblematic works of modern and contemporary architecture.

The advice of the student by the teaching staff in the classes is really useful, because it takes place at the same time and physical space where the work is being carried out, being able to solve fundamental questions such as the choice of point of view, the fitting of the drawing, fugues, proportions or 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.

**CRITICAL SESSIONS.** Dedicated to the follow-up by the teaching staff of the autonomous work that the students carry out outside of school hours. The exchange of ideas in the group is considered of great importance, so that they share what they have learned and learn from what their classmates have exposed.

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

The work that the student develops autonomously, 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 like this, in which the intellectual evolution of the student goes hand in hand with the evolution of their manual skills, it cannot be accumulated in the vicinity of the evaluation, but rather requires a continuous effort. These works are explained in detail and are delivered throughout the semester with deadlines indicated in the course programming calendar.

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

The main work techniques that are used in a complementary manner throughout the semester are:

- Drawing in pencil or colored ink, using watercolor as a basic technique.
- Photography and digital process of the image

#### 4.4. Course planning and calendar

The main objective of the subject Architectural Graphic Expression 4 [EGA4] is for the student to be able to represent and analyze architectural works or urban environments through graphic means. The structure of the course is based on four strategies to generate and represent spatial depth.

It is a constant challenge in the representation techniques explored to date. As Heinrich Wölfflin points out in his work *Fundamental Concepts of the History of Art*, the rudimentary representation of the primitives appears linked to the surface, but once it has taken over the foreshortening and perspective, it begins to annul the surface and run in terms of depth. . Regarding space, beyond its representation, its perceptive experience is based on the distribution of elements and their interrelation in it. Classical treatises from Vitruvius to the early years of the 20th century do not make explicit reference to space as a plastic term, nor as an artistic value. It is in the second half of the 20th century when the concept of space begins to be fully assumed, and to be considered the true essence of architecture.

In order to synthetically or perceptively represent spatial depth in architecture, four strategies are used to structure the course:

##### - Linear rhythms

The rhythmic repetition of linear elements in a three-dimensional space is a mechanism that derives from strategies developed in the avant-garde and incorporated into later methodologies in order to generate depth.

##### - Articulated planes

The free composition of lines and planes approaches a concept of eccentric space, from the center to the periphery in dynamic balance, in which the dimensions of depth and time acquire a new plastic expression.

##### - Delimitation planes

The representation of bounded spaces is proposed through classic resources focused on recreating the atmosphere and defining the delimiting planes with the treatment of their materiality and the incidence of light.

##### - Transparent planes

The analysis of transparency and the dematerialization of the limit allows a reading of modern architecture, of fluid and connected spaces, from the representation of material dissolution and spatial relationship.

The work on these concepts that articulate the course is carried out by drawing from life, as a means to represent the space and interpret it according to the criteria considered, and case studies that are proposed for their direct application in order to establish knowledge and provoke a reflection on them.

Both types of work are developed in parallel, both in class practices and in deliveries to be made outside of school hours.

#### 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<sup>2</sup>, 100 sheets]
- Bloc XL Canson [Din A-4, 160 gr./m<sup>2</sup>, 50 sheets]

###### Watercolor drawing

- Watercolors [recommended 12 colors, Schminke]
- Paintbrushes [recommended 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<sup>2</sup>]
- Bloc XL Canson [Din A-4, 160 gr./m<sup>2</sup>, 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

## **BIBLIOGRAPHY**

### **Basic Bibliography**

- **Albers, J.** 2006. *Interacción del color*. Madrid: Alianza.
- **Arnheim, R.** 2001. *La forma visual de la arquitectura*. Barcelona: Gustavo Gili.
- **Ching, F.** 1998. *Arquitectura. Forma, espacio y orden*. Barcelona: Gustavo Gili.
- **Cortés, J.A.** 2018. *La liberación vanguardista*. Madrid: Fundación Arquia.
- **Edwards, B.** 2006. *El Color. Un método para dominar el arte de combinar colores*. Barcelona: Urano.
- **Goethe, J.W.** 2008. *Teoría de los colores*. Murcia: Consejo general de arquitectura técnica de España.
- **Gombrich, E. H.** 2002. *Arte e ilusión. Estudio sobre la psicología de la representación pictórica*. Londres-Nueva York: Phaidon.
- **Montes Serrano, C.** 1992. *Representación y Análisis Formal*. Universidad de Valladolid.
- **Wolfflin, H.** 2009. *Conceptos fundamentales de la Historia del Arte*. Madrid: Espasa Calpe.

### **Specialized bibliography**

- **Ábalos, I.** 2000. *La buena vida. Visita guiada por las casas de la modernidad*. Barcelona: Gustavo Gili.
- **Bachelard, G.** 1998. *La Poética del Espacio*. Madrid: Fondo de Cultura Económica.
- **Baker, G.H.** 2000. *Le Corbusier, análisis de la forma*. Barcelona: Gustavo Gili.
- **Berger, J.** 2016. *Modos de ver*. Barcelona: Gustavo Gili.
- **Bitterberg, K.G.** 1976. *Bauhaus*. Stuttgart: Institut Fur Auslandsbeziehungen
- **Calatrava, J. (ed.)**. 2007. *Le Corbusier. Museo y colección Heidi Weber*. Madrid: MNARS
- **Campo Baeza, A.** 2013. *Establecer el orden del espacio*. Madrid: ETSAM.
- **Deleuze, G.** 2007. *Pintura, el concepto de diagrama*. Buenos Aires: Cactus.
- **Fiedler, J.; Feierabend.** 2000. *Bauhaus*. Madrid: Könemann.
- **Flores, R.; Prats E.** 2000. *Through the canvas. Architecture inside dutch paintings*. University of New South Wales.
- **Morris, L.L.** 1994. *Josef Albers: Glass, Color and Light*. Nueva York: Guggenheim Museum.
- **Ozenfant, A.; Jeanneret, C.E.** 1999 (1918). *Après le cubisme*. París: Altamira.
- **Rowe, C.; Slutzky, R.** 1997. *Transparency*. Basilea, Suiza: Birkhauser.
- **Sancho Osinaga, J.C.** 2000. *El sentido cubista de Le Corbusier*. Madrid: Munilla.
- **Smith, E.** 2002. *Case Study Houses. The complete program*. Köln: Taschen
- **Sutton, P.C.** 1999. *Pieter de Hooch 1629-1684*. Hartford, Connecticut: Wadsworth Atheneum.