

Academic Year/course: 2021/22

## 30703 - Architectural graphic expression 2

### Syllabus Information

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**Academic Year:** 2021/22

**Subject:** 30703 - Architectural graphic expression 2

**Faculty / School:** 110 - Escuela de Ingeniería y Arquitectura

**Degree:** 470 - Bachelor's Degree in Architecture Studies

**ECTS:** 6.0

**Year:** 1

**Semester:** First semester

**Subject Type:** Basic Education

**Module:**

### 1. General information

### 2. Learning goals

### 3. Assessment (1st and 2nd call)

### 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. This course has a practical orientation so the proposed activities both on-site and autonomous ones are practices directly related to the drawing and the ability to represent objects or spaces.

#### 4.2. Learning tasks

This course is organized as follows:

EGA 2 is an introduction to the drawing and to the analysis of the architectural space, their learning as a tool for architecture-centric. The course has a practical orientation so the proposed activities both on-site and autonomous are practices directly related to the drawing and the ability to represent forms and environments. The course develops in two sections: expressive drawing and analytical drawing.

#### 4.3. Syllabus

This course will address the following topics:

The course has been divided into a series of sections in order to facilitate learning. In each section, new concepts are incorporated so that students can assimilate them gradually and simply.

##### INITIATION TO THE DRAWING OF EXPRESSIVE DRAWING

This first section will be introductory and different activities of a more expressive nature are proposed:

- Slides: Draw projected images on a screen for very variable periods of time, which can be from one hour to one minute. We will also work by heart. The figure background relationship is studied as a means to achieve depth in the drawing.
- Framing: The framing is worked as a way to transform the three-dimensional reality to the two dimensions of the paper. The composition is also practiced.

## LINE DRAWING IN CONICAL PERSPECTIVE

This second section is dedicated to line drawing in conical perspective and has an analytical character. A perspective is a two-dimensional representation of the appearance (that is, what we see) of an object, as opposed to the reality (that is, what we know) of this object. The advantages of this representation system will be worked on, when and how it should be used and the basic fundamentals:

- Placement of the horizon line.
- Definition of the pictorial plane.
- Vanishing points:
  - Perspective with a single vanishing point.
  - Perspective with two vanishing points

## SHADOWS DRAWING

This section is dedicated to the study of shadows and has an analytical character. The own shadows and casted shadows are used in architectural graphics to express both the depth and the shape of the surfaces, if they are flat or rounded, if they are inclined or vertical, thus making the drawings more understandable. Then, when drawing with shadow, it is no longer necessary to draw lines.

## COLOR DRAWING

This section, the last one with an analytical character, is dedicated to the study of color using different media such as colored pencils, waxes, and watercolors. To work with color, from an architectural point of view, a great capacity for observation and knowing how to synthesize what is observed is required.

### 4.4. Course planning and calendar

The timetable depends on the number of weeks of each year and the needs of the group so it can vary significantly.

#### On-site calendar:

**Session 1:** Presentation of the course, in which we will discuss the syllabus.

#### Session 2: Vegetation

Vegetation will address the issue of the representation of isolated vegetation, ideal to finish with the representation of vegetation altogether, creating landscape. In the representation of vegetation, such as a tree or shrub, first you must set the structure through axes, these axes subsequently be transformed into the trunk and main branches, we will continue with the ramifications of lesser importance, and will finally define the volumetric envelope of the tree, i.e., the foliage and small branches of it. At this time the texture and shade producing foliage comes into play, which depending on the feeling and the situation of proximity or distance will be represented with a level of definition or another.

#### Session 3: Fitting and framing

We must distinguish between fitting and framing.

To fit is to put the figures in boxes so that there is a simplified control of measures and proportions, verifying the construction of the figure within it. There are exceptions, in which we must violate the laws of proportion so that the drawing has a greater sense of realism. This happens for example in foreshortening, foreshortening occurs when a body is located at an oblique level or perpendicular to our vision.

While framing means: "Enclose in a frame or square." This definition implies the existence of three elements: the frame or plane of the picture, what is going to be enclosed or model and the one that executes the action from a certain place or point of view. In this definition, framing is not an exclusively pictorial action, it also appears in other disciplines such as cinema and photography. The difference is the means used to execute the action, in photography it is through the camera, in the cinema, it is through the film camera and in the drawing it is through the eye of the artist.

That is why photography is born from drawing, and cinema from photography. Degas in his compositions was influenced by photographic frames, which reflected a random moment, rather than a composition designed for that purpose, according to his words: "I look through the eye of a lock." This means that the artist or the painter to make the framing can use external mechanisms, mechanisms to generate the plane of the painting or drawing, such as the keyhole. The so-called drawing plane is a mental concept, where we visualize a transparent framed plane, through which we see the model. This system serves to transform what we see, three-dimensional, into a drawing on a plane, two-dimensional.

To fit: to adjust something within a thing. Determining the limits of something by including it in a scheme or organization.

That is, framing is an action and as such implies an intention. It is the cartoonist through the chosen point of view and the framing of the same, which expresses his ideas about what is represented and forces the viewer to share his own point of view. Hence the importance of the point of view and framing, in order to emphasize what you want to express in the drawing.

Depending on the format there are several types of framing, the main ones are vertical, horizontal and square. These are much more important in photography than in drawing, since photography has more rigid formats, while in drawing the format is freer. Depending on what we want to express we can use one frame or another. The horizontals give a sense of stability, serenity, mark a horizontal direction. Verticals usually imply a sensation of movement, ascension, strength.

#### Session 4: Introduction to conical perspective

There are many ways to represent space, in the West for more than 500 years the most used is the conical perspective, since it is a method that suggests very effectively the real vision of a model if we close one eye. Although Euclides 300 B.C. had already laid the foundations of perspective, it was not studied exhaustively until the Renaissance.

The conical perspective of a given point can be defined as the place or point of intersection between the plane of the frame and the vision ray. The plane of the picture is defined as the plane on which it is projected to form an image or drawing. The vision ray is defined as the straight line that joins the observation point or point of view with the determined point

**Session 5: Indoor environment I**

The representation of simple interior spaces through conical perspective through border lines and strokes.

**Session 6: Outside environment I**

The representation of simple outdoor spaces by conical perspective through border lines.

**Session 7: Indoor environment II**

The representation of interior spaces of medium difficulty through conical perspective through border lines and strokes.

**Session 8: Architecture images slides**

Drawing iconic images of the history of architecture, projected on a screen for very variable periods of time from one hour to one minute. The objective is to develop the ability to synthesize when representing images.

This session has a double purpose. On the one hand, it is based on the drawing of architecture images. On the other hand, it instinctively and naturally introduces us to the stain drawing, when we have to make drawings in a very short time we leave aside the border line and the contours, which are more abstract, to resort to the stain.

The stain speaks of the tone, color, and texture of an object. We still won't talk about the color of objects, so we will refer to the tone, as the amount of white or black that an object has, and to the texture as a surface quality of a material.

In line drawing, the feeling of stain is achieved by superimposing more or less dense lines, until forming a plot, and this will define the tone and texture.

**Session 9: Introduction shadows**

The representation of simple prismatic figures through conical perspective, executing the lights and shadows through spots.

**Session 10: Indoor environment I**

The representation of simple interior spaces by means of conical perspective executing the lights and shadows through spots.

**Session 11: Indoor environment II**

The representation of interior spaces by means of conical perspective executing the lights and shadows through spots.

**Session 12: Interior environment III**

The representation of interior spaces by means of conical perspective executing the lights and shadows through spots.

**Session 13: Interior environment IV**

The representation of interior spaces by means of conical perspective executing the lights and shadows through spots.

Further information concerning the timetable, classroom, office hours, assessment dates and other details regarding this course will be provided on the first day of class or please refer to the College of Higher Engineering and Architecture (EINA) website (<https://eina.unizar.es/>) and Moodle.

## 4.5. Bibliography and recommended resources

Although the hands and minds control the finishing of drawing and painting, working with a team and quality materials makes drawing a more pleasant experience. By what the course will require different equipment and materials.

1. INK DRAWING: fountain pen, Staedtler calibrated markers. 0.8 thickness.
2. PENCIL DRAWING: Pens or pencil holders of different hardness and thickness of mine, preferably type of mine 2B-4B and minimum diameter of mine 2mm. Graphite. Soft rubber or malleable rubber.
3. WATERCOLOR DRAWING: Watercolors in Schminke brand pill. 12 color box is recommended. Round red marten type watercolor brushes nº 6-12-20 of Winsor & Newton or Rembrandt brand. Rags Plastic buckets, for color mixing.