

Academic Year/course: 2022/23

25865 - Artistic Expression I

Syllabus Information

Academic Year: 2022/23

Subject: 25865 - Artistic Expression I

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 558 - Bachelor's Degree in Industrial Design and Product Development Engineering

ECTS: 6.0

Year: 1

Semester: First semester

Subject Type: Basic Education

Module:

1. General information

1.1. Aims of the course

The subject and its expected results respond to the following approaches and objectives:

The main objective of the Artistic Expression I subject is to provide students with a basis to apply different techniques of representation of industrial products.

It is intended at the same time to provide students with graphic and communicative knowledge that allows them to carry out product presentations in panel format that are effective.

An additional objective of this and of the group of subjects of the first semester of the degree is to carry out a task of integration of knowledge, proposing an interdisciplinary work common to all of them. In this work, which is articulated around different products, one of the activities requested is an analysis and reflection of these products, from the point of view of the SDGs. These approaches and objectives are aligned with the 2030 Agenda (<https://www.un.org/sustainabledevelopment/es/>), in such a way that the acquisition of the learning results of this activity provides training and competence to the students to contribute in some measure to your achievement.

1.3. Recommendations to take this course

In order to take the subject with the best chances of success, it is recommended that the student have a minimum notion of fit and proportion in drawing.

2. Learning goals

2.1. Competences

BASIC COMPETENCES

CB01. Students have demonstrated knowledge and understanding in a field of study that is part of the general secondary education curricular, and is typically at a level which, although it is supported by advanced textbooks, includes some aspects that involve knowledge of the forefront of their field of study.

CB02. Students can apply their knowledge to their work or vocation in a professional manner and have competences typically demonstrated through devising and defending arguments and solving problems within their field of study.

CB03. Students have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include an important reflection on social, scientific or ethical issues.

CB04. Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

CB05. Students have developed those skills needed to undertake further studies with a high degree of autonomy.

GENERAL COMPETENCES

GC01. Able to acquire basic knowledge of the profession of industrial design, to combine that generalist knowledge and expertise with those who generate innovative and competitive proposals.

GC04. Ability to organize time effectively and coordinate activities to acquire new knowledge quickly and perform under pressure.

GC05. Capacity to collect, manage, analyze and synthesize information from various sources for the development of design projects and product development. Capacity to use this documentation to obtain conclusions aimed at solving problems and making decisions with initiative, creativity and critical thinking, in order to generate new product concepts, new ideas and solutions.

GC06. Ability to generate the necessary documentation for the proper transmission of ideas through graphics, reports and technical documents, models and prototypes, oral presentations in Spanish and other languages.

GC07. Ability to use and master techniques, skills, tools and techniques and communication and others specific of design engineering needed for design practice.

GC08. Ability to learn continuously, to develop autonomous learning strategies and to work in multidisciplinary groups with motivation and determination to achieve goals.

GC10. Ability to plan, budget, organize, direct and control tasks, people and resources.

SPECIFIC COMPETENCES

SC05. Ability to conduct effective and professional presentations through drawing and digital technologies using visual skills to communicate ideas and concepts quickly and efficiently, by selecting the most appropriate media and content.

3. Assessment (1st and 2nd call)

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

Students must demonstrate that they have achieved the intended learning outcomes through the following assessment activities:

A. Through continuous evaluation 80%

The student body will continuously develop practices that will be evaluated. A part of this evaluation will correspond to a self-assessment process.

Continuous assessment will be implemented as a set of tests, reports, work or systematic controls that must be carried out in its entirety during the teaching period.

* Students must take an exam, although alternatively they can pass with continuous evaluation.

B. By written/graphic or presentation test 20%

The student will develop a theoretical/practical or presentation test, in which he must record the learning results achieved.

* The student body must have delivered all mandatory practices on the date and in the manner indicated to pass the subject.

* To pass the subject, students must obtain a minimum of 4.5 points to be able to average in all the activities that make up the evaluation.

Note: Following the regulations of the University of Zaragoza, a global evaluation test will also be scheduled for the student body that decides to opt for this second system.

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:

The subject of Artistic Expression I consists of 6 ECTS credits, which entails a total dedication by the student of 150 hours of work. This computation is distributed in 60 hours of face-to-face activities (2.4 ECTS) and 90 hours of non-face-to-face activities (3.6 ECTS).

The subject is taught during the first semester of the academic year, over 14 weeks of activity.

The program offered to the student to help him achieve the expected results includes a series of theoretical classes, practical work sessions and directed group work.

The 6 credits of the course are organized as follows:

Master classes - 15h.

During the 13 weeks of the semester in which the subject is taught, 1 contact hour is dedicated weekly to the theory class. Once the program is finished, a 1-hour review class is included to clarify possible doubts raised by the students before the exam.

Practical classes - 39h.

Directed works - 12h.

The directed works are guided by the teacher through a 2-hour seminar and 15-minute tutorials for each group, in which the work is monitored. The results of these works are presented by the students to the teaching team through an oral presentation.

Student personal work - 81h.

The personal work developed by the student is distributed as follows: 65h (practical work) +16h (theoretical study). It is recommended that students dedicate about 5 hours a week to work on the subject.

Realization of exams - 3h.

3 hours are assigned to the completion of the official examination of the subject.

4.2. Learning tasks

The course includes the following learning tasks:

1. Lectures.

1 hour per week is devoted to the treatment of the theoretical content of the subject. The lecture and the use of ICT will be used to encourage the development of general skills and specific qualifications of the subject in the student. The theoretical explanations will be provided with examples that are clarifiers for the student. In order to achieve greater student participation, it will take place the implementation of active methodologies as the groups and roles dynamics working. Each block of theoretical content will carry the corresponding proposed activity.

2. Practical classes.

3 hours per week to enhance the student's ability to represent industrial products through experimentation with different techniques of graphic representation. In each practical class you will work with a different product. It is necessary that the student goes to practical classes with the corresponding material. Working with three-dimensional products and product images showing different views will be combined.

3. Supervised projects

These works are develop both individually and in groups.

4. Independent work of the student.

The student will apply content rights treaties to solve the proposed work. This activity is essential in the learning process and overcoming evaluation activities.

4.3. Syllabus

Taking into account the learning results of the subject, the contents that will allow these results to be achieved, are divided into blocks that are addressed in the theory, practical and directed work classes.

For this, it is proposed to use different pedagogical models and activities when addressing the different contents, in order to achieve both the learning results and the skills of the subject.

Below is a summary of the general content program to be worked on in the theoretical and practical sessions of the subject:

Visual language and grammar of graphic expression: Approaches to the shape and structure of the product

1. Interaction elements in graphic representation: conceptual elements, visual elements, relationship elements and frame of reference.
2. Types of lines, legends and their functions in the sketching of products.
3. Difference between form and structure of a product.
4. Choice of views and composition.
5. The language of forms.

Criterion of proportion in the industrial product

1. Concept of proportion.
2. Use of a module in the calculation of proportions.
3. Representation scale.
4. Proportional relationships in product design. Use of the golden ratio.
5. Human figure proportion and its representation next to the product.

The light and volumetric representation of the product

1. Incidence of light in perception. Light sources and variables of the luminous aspect.
2. Main applications of the light source.
3. Main positions of the light source.
4. Representation of the volume and finishes of the product.
5. Design of highlights and their adaptation to the product.

Design of product presentation panels

1. Grid concept.
2. Types of grids.
3. Elements of the presentation panel.
4. Relationships between panel elements.
5. Panel analysis.

Formal exploration, color and its perception in the industrial product

1. Formal exploration. Stages and presentation.
2. Chromatic sensation.
3. Color analysis levels.
4. Additive and subtractive synthesis.
5. Attributes and color cards.

The practical classes are sequenced in the following blocks:

- I. Line, proportion and composition (Graphite pencil).
- II. Chiaroscuro, color and background design (Pastel and colored pencil).
- III. Design of presentation panels (Marker).
- IV. Formal exploration (mixed techniques).

4.4. Course planning and calendar

Schedule sessions and presentation of works:

Contents by weeks	Contents
Weeks 1-2	Visual language and grammar expression graphics: Approaches to the form and product structure.
Weeks 3-4	Proportion analysis in product design
Weeks 5-6	Proportion analysis in product design
Weeks 7-8	Light and the product volumetric representation
Weeks 9-10	Design of highlight funds
Weeks 11-12	Presentation panels design
Weeks 13-14	Color treatment in product design

4.5. Bibliography and recommended resources

<https://psfunizar10.uni>