

Academic Year/course: 2022/23

29697 - Semiotics in design

Syllabus Information

Academic Year: 2022/23

Subject: 29697 - Semiotics in design

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

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

ECTS: 6.0

Year: 4

Semester: First semester

Subject Type: Optional

Module:

1. General information

1.1. Aims of the course

The subject Semiotics is optional, and aims that interested students can deepen the knowledge of aspects related to the communicative capacity of the products: With this purpose in the subject contentes will be exposed related to the knowledge of different types of language, the theory of communication, the psychology of perception and the cognitive, emotional and user response processes.

All the training provided by this subject (theoretical and practical) contributes transversally to the 2030 AGENDA and SDGs, since their training enables the student to contribute to the development and management of the 245 SDG indicators proposed by UNEP.

1.2. Context and importance of this course in the degree

It is an optional subject. By means of the same students can deep in the knowledge of some of the key aspects of the product that affect and condition their relationship with the user. In a growing context of smart products, it is increasingly important that the dialogue between the user and the product be developed according to established plans that effectively control the way in which the human / artificial conversation takes place. For this, any design professional must consider different language alternatives, organization of the semantic contents of the communicative event and anticipation of the cognitive processes that will be triggered in the user's mind as a consequence of the use of the product.

1.3. Recommendations to take this course

There are no prerequisites to take this subject. However, students are recommended to have passed the basic training subjects as well as the compulsory subjects Graphic design applied to the product, Design Workshop V, Photography, Composition and Editing of Images and User-Product Interaction.

2. Learning goals

2.1. Competences

In this subject, the following specific, general and basic competences are developed:

CE24 - Ability to take into account all the ergonomic, interaction and usability aspects in the design and evaluation of a task, product or space.

CG03 - Ability to conceive and develop design projects, in the aspects related to the character of products and services, their relationship with the market, the environments of use and the user, and attending to its manufacture, selection of materials and processes more appropriate in each case considering relevant facets such as quality and product improvement.

CG04 - Ability to organize time effectively and coordinate activities, quickly acquire new knowledge and perform under pressure.

CG05 - Ability to obtain, manage, analyze and synthesize information from various sources for the development of design and product development projects. Use this documentation to obtain conclusions oriented to solve problems and make decisions with initiative, creativity and critical reasoning, generating new product concepts, new ideas and solutions.

CG06 - Ability to generate the necessary documentation for the proper transmission of ideas through graphic

representations, reports and technical documents, models and prototypes, verbal or other presentations in Spanish and other languages.

CG07 - Ability to use and master the techniques, skills, computer tools, information and communication technologies and engineering design tools necessary for the practice of the same.

CG08 - Ability to learn continuously and develop autonomous learning strategies, and to work in multidisciplinary groups, with motivation and responsibility for work to achieve goals.

CG09 - Know the industries, organizations, regulations and procedures and other elements to take into account in industrial design projects.

CB1 - That students have demonstrated to possess and understand knowledge in an area of ??study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge coming from the vanguard of their field of study.

CB2 - That students know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of ??study.

CB3 - That students have the ability to gather and interpret relevant data (usually within their area of ??study) to make judgments that include a reflection on relevant social, scientific or ethical issues.

CB4 - That students can transmit information, ideas, problems and solutions to a specialized and non-specialized public.

CB5 - That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

2.2. Learning goals

Ability to carry out a correct communication through the product.

2.3. Importance of learning goals

The correct development of the semantic level of the product is fundamental to guarantee the success of its functional objectives and its potential acceptance by the market. The user must be able to recognize the product, its capabilities, its value, its mode of use, and maintain a successful dialogue that not only meets their needs but also provides the best possible user experience.

3. Assessment (1st and 2nd call)

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

Individual theoretical exercise, in the form of a small research paper; 50% of the final grade.

Practical exercise, in the form of total or partial development of the design of a product, or in the form of development of an experiment in which users participate; This practical exercise can be carried out individually or as a team depending on the scope and characteristics thereof; 50% of the final grade.

The sequencing and delivery dates will be arranged following a continuous evaluation model. However, following the regulations of the University of Zaragoza in this regard, it will also be scheduled a single test of global evaluation for those students who choose to opt for this second system.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

This course is based on the model of learning based on projects or "learning by doing". In this sense, a series of expository-type classes are proposed, where the most relevant theoretical contents are shown, together with sessions of debate and discussion of cases and realization and follow-up of projects and / or experiments with users

4.2. Learning tasks

The course has 6 ECTS credits, which correspond to 60 class hours plus 90 hours of independent work and includes the following learning tasks:

- 30h of theoretical classes, with the exposition of program topics and discussion and debate of cases.
- 25h of practical classes, aimed at the revision and monitoring of projects and practices in the realization by students.
- 30h of study and theoretical and documentary research by students.
- 15h of reporting.
- 45h of realization of practices.
- 5h of making presentations.

A series of supervised internship sessions will also be scheduled (depending on the assigned availability), for the direct tutoring of the research tasks to be developed by the students.

4.3. Syllabus

The course will address the following topics:

- 1 A general approach to semiotics applied to product design.
- 2 Types of language applied to product design.
- 3 Communication and emotional design. Influence on the user experience.
- 4 Design specifications from semiotics. Development of the functionality of the product through the development of its communicative capacity.
- 5 Theory of communication: communication and its basic elements. Analysis and conceptualization tools.
- 6 Psychology of perception: sensory perception. Types of stimuli. Unimodal/multimodal perception.
- 7 Application of semiotics in the field of product design.
- 8 Reviews of case studies and scientific literature.

4.4. Course planning and calendar

The theoretical and practical classes will be distributed weekly according to the official calendar available in eina.unizar.es.

The sequencing of the program of theoretical contents and the dates of completion and delivery of the different works will be facilitated at the beginning of the subject.

4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=29697&Codcentro=110>