

Academic Year/course: 2021/22

## 62942 - Design and Social context

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 62942 - Diseño y contexto social

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

**Degree:** 330 - Complementos de formación Máster/Doctorado  
562 - Master's in Product Development Engineering

**ECTS:** 6.0

**Year:** 562 - Master's in Product Development Engineering: 1  
330 - Complementos de formación Máster/Doctorado: XX

**Semester:** First semester

**Subject Type:** 562 - Compulsory

330 - ENG/Complementos de Formación

**Module:**

## 1. General information

### 1.1. Aims of the course

The subject and its expected results meet the following approaches and objectives:

The course aims to deepen the analysis of the role played by products as a social agent from different perspectives and working methods. In the same, critical thinking of students about the social implications arising from the activity of product design is enhanced, so that they are aware of the responsibility of their work. At the same time, the success of a product on the market is largely determined by their ability to bind to a particular social context.

These approaches and objectives are aligned with some of the Sustainable Development Goals, SDGs, of the 2030 Agenda (<https://www.un.org/sustainabledevelopment/en/>) and specific specific goals, in such a way that the acquisition of the Learning outcomes of the subject provide training and competence to the student to contribute to a certain extent to their achievement:

Goal 1: End poverty in all its forms worldwide

Goals 1.4 and 1.5

Goal 5: Achieve gender equality and empower all women and girls

Goals 5.1 and 5.b

Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

Goals 8.2, 8.3, 8.4, 8.5, 8.6 and 8.9

Goal 9: Industry, innovation and infrastructure

Goals 9.2, 9.4, 9.5, 9.b and 9.c

Goal 10: Reduce inequality in and between countries

Goals 10.2

Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable

Goals 11.2, 11.3, 11.4, 11.a, 11.b and 11.c

Goal 12: Guarantee sustainable consumption and production patterns

Goals 12.2, 12.5, 12.6, 12.7 and 12.8

Goal 13: Take urgent measures to combat climate change and its effects

Goals 13.3

Goal 16: Promote fair, peaceful and inclusive societies

Goals 16.7

## 1.2. Context and importance of this course in the degree

The deep understanding of the relationship between the product and other social actors and individuals in a community is a key to understanding some of the methods and theories of most current design basis. This type of approach requires some previous knowledge in the field of product design, so that this approach is suitable as a compulsory subject in the context of master level studies.

## 1.3. Recommendations to take this course

This course is part of the block of mandatory subjects within the first semester of the Master, and focuses on the analysis and implementation of the ways in which product design is capable, on the one hand, to influence the development of human societies and, on the other hand, a reflection of its features. From this point of view, the product is established as a social agent that affects the whole social environment and is in turn affected by it. Students, to pass the course should be able to apply to their design projects knowledge related to this approach to the product. To take this course is highly recommended to have knowledge of user analysis and use environment as well as experience in several general product design methodologies.

## 2. Learning goals

### 2.1. Competences

Passing the course, students will be more competent to ...

- Analyze and understand the characteristics of different human societies and to understand the value and role of the product in a social and cultural context.
- Use techniques of collection and analysis of data reflecting the behavior of a product as a social agent and the emotional and affective result it causes in its users.
- Design and integrate in product specifications aspects of emotional and social matters, and to relate sociocultural evolution with state of the art technology in the field of product design.
- Integrate various technical knowledge in the context of a holistic view of the product.

### 2.2. Learning goals

The student, for passing this subject, should demonstrate the following results...

- He/She is able to analyze and understand different characteristics of human societies and the role of products in them.
- He/She is able to employ techniques of collecting and analyzing data, reflecting the behavior of a product as a social agent, and the emotional and affective result that a product has on its users.
- He/She is able to design and integrate in the specifications of the product aspects related to emotional and social level products.
- He/She is able to understand the product in a cultural context.
- He/She is able to relate sociocultural evolution with state of the art technology in the field of engineering product design.

### 2.3. Importance of learning goals

A design professional conducts activity in a framework that must incorporate a thorough understanding of the social context. The products reflect the socio-cultural environment, values, trends and characteristics, and in turn are agents capable of influencing it.

Conditioned by this context, users of a product set with this emotional relationships and emotional bonds that influence the potential success of the product in a manner at least as important as its technical performance.

Product design has other effects on the social sphere: not only for its ability to generate economic wealth, but because it can also play an inclusive effect of individuals in the social context, being able to provide that technology can be enjoyed and at the service of the greatest possible number of people.

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

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

The student must demonstrate that has achieved the intended learning outcomes through the following evaluation activities:

70% practical work.

30% Theoretical evaluation, through written tests or theoretical work.

To pass the course, you must pass both parts of the course, theory and practice.

Following the rules of the University of Zaragoza, also an overall assessment will be scheduled for students who decide to opt for this second system.

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

### 4.1. Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, analysis and discussion of theoretical contents, assignments, application of contents on case studies, and a project.

### 4.2. Learning tasks

The course (6 ECTS: 150 hours) includes the following learning tasks:

- Lectures, problem-solving and case studies (20 hours).
- Practice sessions (40 hours).
- Assignments (70 hours). Autonomous work and practical research.
- Tutorials (4 hours).
- Autonomous work and study (10 hours).
- Assessment (6 hours).

### 4.3. Syllabus

The course will address the following topics:

1. Sociology, ethnology and ethnography
2. Psychology of perception. Neuromarketing
3. Emotional/Affective Design
4. Trend analysis
5. Exclusive/Universal design
6. Responsible Design
7. Design as a social and cultural agent
8. Information capture tools to analyze design in the social context

### 4.4. Course planning and calendar

The course will address the following topics:

#### Lectures

1. Types and models of social structure. Roles of different types of product as a social agent.
2. Design focused on people. Different analytical approaches (observation, participation, data capture).
3. Universal design. Design inclusive / exclusive (by economy, gender, technological knowledge).
4. Design as a social and cultural agent. User networks based on relationship models.
5. Emotional / affective design.
6. Psychology of perception. Neuromarketing.
7. Sustainable design.
8. Design and social responsibility.

9. Design and social identity. Trend analysis.
10. Design as an agent of social and cultural intervention.

Note: The lectures includes teacher's explanations, participative discussions, and the drawing of conclusions. Several topics are discussed such as different conceptual principles, methodologies and tools to capture information, which are relevant to analyze the design in the social context.

#### **Practical assignments**

- Case study analysis.
- Preparation of one or more projects to develop the implications of design in the social context.

Note: Details of the characteristics of the different assignments will be provided in class.

All activities, tasks and key dates will be communicated at the beginning of the course.