

Academic Year/course: 2021/22

62941 - Creativity management in professional environments

Syllabus Information

Academic Year: 2021/22

Subject: 62941 - Creativity management in professional environments

Faculty / School: 110 - Escuela de Ingeniería y Arquitectura

Degree: 562 - Master's in Product Development Engineering

ECTS: 6.0

Year: 1

Semester: First semester

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The course aims to get the student, through management and leadership in creativity individually or group, can make conceptual proposals for product innovation, which are related and reinforce the needs of other contents of the master.

The assessable contents of this course do not give by themselves direct abilities to the student to achieve any specific objectives of the 2030 Agenda. However, its transversal nature provide essential skills to apply to the rest of the subjects of the Master and the professional environment, directly related to the 2030 Agenda.

1.2. Context and importance of this course in the degree

Creative process brings diversity to develop solutions in the field of product design and belongs to the design process integrated into their methodologies.

More specifically, it is intended that the student knows and works in Co-Creation and Co-design, Open Innovation, Collective Intelligence or the Creative Clusters. All this applied to the conceptual design in search of the essence of products and services, creating opportunities for differentiation.

1.3. Recommendations to take this course

Knowing the creative thought process and creative methods, individual and group problem analysis techniques, idea generation and idea selection techniques is needed. Having a good predisposition to the development of creative processes, flexibility and open-mindedness as well as good communication skills own of this subject is an advantage.

2. Learning goals

2.1. Competences

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

- Lead creative teams on design projects and capable in generating new product concepts integrating differentiating product features.
- Generate ideas in collaborative environments leveraging resources from other members in a working group.
- Interact with experts from the outside environment by integrating external inputs.

2.2. Learning goals

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

- Can be creative and lead creative groups. Is able to define team members profiles to create a multidisciplinary group.
- Knows external sources from which to extract resources to apply in projects.
- Is able to stimulate a creative group and apply specific creative techniques in each project phase.
- Is able to define the traits and characteristics that generate innovative product concepts.
- Is able to communicate ideas to other designers

2.3. Importance of learning goals

The subject is compulsory, so it is considered that training in this area is important for the professional development of the student.

3. Assessment (1st and 2nd call)

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

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

1: The course consists of two parts with different percentage:

- 70% practical work
- 30% Theoretical evaluation through written work (examination or individual written work).

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

2: Assessment will be conducted in a continuous manner and by the teachers group of the subject

All work, exercises or projects are assessed with rubrics designed specifically. These rubrics are available for students.

3: The subject arises in three parts, the case analysis, exercises and the development of a project.

- Case analysis part of the theoretical evaluation. The student must find and choose a case, analyze it, discuss it and present a written work with conclusions.
- The project integrates the work done in practical lessons, which ends in submitting a design concept.

Following the rules of the University of Zaragoza in this regard, in the subjects they have systems continuously or gradual assessment, also it schedules a test overall assessment 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.

The course syllabus is organized in 5 sections, whose theoretical part is explained in lectures and the practical part is worked in practice sessions and case discussion sessions. Students will apply the learnt concepts and contents in different exercises and/or projects.

The learning process is based on reflection and discussion of specific cases that are generic enough to apply to other situations, and with the solving of simple exercises, the students' creativity arises. This practical approach is expected to help the learning of the theoretical contents.

4.2. Learning tasks

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

- Lectures (10 hours). In them, the teacher presents the theoretical contents of the syllabus and solves some "model" problems.
- Case discussion (10 hours). In addition to lectures' explanations, case studies are used by the students to analyze professional situations in order to make an experiential conceptualization and search for effective solutions.
- Practice sessions (36 hours). They are based on experiences, problems or exercises done in the classroom. These practical classes will assist the students to explore and work on a practical problem by applying interdisciplinary

knowledge in a project format. Some of the work will consist on preparing seminars, lectures, research papers, reports, etc. to present or submit in lectures or in a written format.

- Special sessions (4 hours). Visits or other activities.
- Assignment (70 hours). Autonomous work or practical research.
- Tutorials (4 hours).
- Study (10 hours).
- Assessment (6 hours). A set of written and/or oral tests, assignments, projects, etc.

4.3. Syllabus

The course will address the following topics:

- Open Innovation: Collective intelligence, open to change organizations, contribution of the external environment. Industrial sectors interaction for innovation.
- Creative Cluster: Interaction of industrial sectors for innovation.
- Innovation Management and Certification in companies: Standard 166001. Motivated Reports.
- Co-creation and co-design: Creativity in interdisciplinary groups, contribution by multidisciplinary profiles.
- Creative leadership: Facilitators of creativity.
- Conceptual design: Essence of products / services, opportunity for differentiation.

4.4. Course planning and calendar

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 virtual platform Moodle.