

#### Información del Plan Docente

Academic Year 2017/18

Faculty / School 110 - Escuela de Ingeniería y Arquitectura

Degree 271 - Bachelor's Degree in Industrial Design and Product Development

Engineering

**ECTS** 7.5

Year

Semester First Four-month period

Subject Type Optional

Module ---

#### 1.General information

#### 1.1.Introduction

The subject develops the product - market - technology strategy, being recommended for those engineers who wish to know the principles of this planning. This will allow you to acquire knowledge to achieve the goals of the organization in which you develop your profession in order to successfully launch your products and thus achieve the recognition of your brands. The signature includes those contents of Economy and Enterprise, in particular of the strategic planning related to the management and the development of the product. Its content is fundamentally practical.

#### 1.2. Recommendations to take this course

It is a subject with a high practical content that develops and deepens the knowledge already introduced in the subjects of the area of previous courses. For this reason, it is recommended that students be taught in person in their sessions dedicated especially to the presentation of contents, presentations and examples, being decisive for their correct assimilation teamwork and active participation.

The practical part of the subject will culminate with the accomplishment of a practical work supervised in group or individual where the student must develop at least one fundamental aspect of the strategic management of a concrete product. In this work must integrate all the contents necessary for this and previously developed in the subject. For those students who, exceptionally and always justifiably, can not do it face-to-face, a test is planned.

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

The subject corresponds to the training in business matters of the degree, is optional with an allocation of 7.5 credits and is taught in the first four months corresponding to the intensification of Business Management Design. It turns out to be the culmination in terms of company of the degree of Engineer in Design and Product Development. This is done by completing the knowledge in this subject taught in the subjects of Economic and Business Aspects of Design, subject of basic training given in the second year, and Marketing Strategies and Legal Aspects of the product subject compulsory and taught in third course. Due to the internal organization, it is not a problem to take this subject in advance to the subject of Marketing Strategies and Legal Aspects of the Product.

In the first of the subjects of the Enterprise area taught in the degree as Economic and Business Aspects of Design, the students in the second year perform a module work together with the subjects of the semester consisting of the development of a product based on real market data. Specifically in relation to Economic and Business Aspects of Design the students carry out at least a strategic planning and study the viability of this product. The following year, in the third year, these same students can deepen their knowledge of business by making a marketing plan in the compulsory course of Marketing and Legal Aspects of the Product, and in the same way in this same third or fourth year course, they can



continue Developing their knowledge in this respect in the integral development of the product management and the creation of value for the brand in the subject of Product Management.

## 1.4. Activities and key dates

Before the 4th week of the semester, the students must select both the product and the fundamental aspects related to their management of which they will develop the work. This selection will be communicated to the teacher responsible for the subject who must give his approval. After this selection the students will make a first exposure to the teacher. Before the 9th week of the semester, the person responsible for the subject should be presented with the development of the strategic approach to product management that is the subject of the work at that date.

Before the 15th week, we must submit and present the work finally developed to proceed with its final evaluation.

## 2.Learning goals

## 2.1.Learning goals

#### The student, to overcome this subject, must demonstrate the following results ...

Is capable of adequately performing the strategic management of the product; Develop the product policy, design the company's product portfolio and perform brand management.

It is capable of designing from the strategic planning a plan of differentiation and launching of the product to the market, using for this the tools of management of products and marks suitable.

It is able to search for the necessary, real and relevant information from various sources, to summarize this information and to use it in the face of the resolution of the real problem that is presented to it.

It is able to present in writing, in form of report, and orally, in form of presentation, the work done taking special care in highlighting the main conclusions, always duly justified using the appropriate terminology.

## 2.2.Importance of learning goals

In today's business world, increasingly competitive and dynamic, it is crucial for the survival of organizations to properly manage their products. A future engineer of product design and development must know the principles of the operation of this management, to make the most beneficial decisions for the organization for which they work and thus reinforce the value of their brands. In this subject, these principles are taught and put into practice, as well as the tools necessary to accomplish all of this. The eminently practical approach of the subject, supported in cases and real data of very relevant international companies, allow the students to prepare themselves for the labor world, developing the necessary competences for their professional performance.

# 3. Aims of the course and competences

#### 3.1.Aims of the course

In a globalized world like the current one every day is more decisive in the survival of the part of the companies its capacity to innovate in the development and launching of its products. This innovative capacity is useless if it is not accompanied by an adequate management of these products and the development of their brands. The subject aims to provide theoretical and practical knowledge to do all this in an integrated way.

#### 3.2.Competences

By passing the subject, the student will be more competent to ...

Search, synthesize the relevant and adequately deal with the information that allows it to face the decision-making process related to the management of the product, the market to which it is directed and the appropriate technology for its elaboration.

Make reports with economic content from relevant information, draw conclusions and know how to synthesise and present oral and written.

Have a global vision of the company that allows you to carry out strategic planning and management of products and



#### brands.

Address problems and look for alternatives in the management of the product and the brand.

Organize both their individual work and their integration and coordination with other people of a team, planning their work during a quarter under the pressure of time and other conditions of the professional world.

To handle specific computer tools to carry out the treatment of the information and the presentation of the same. Maintain above all ethical and socially responsible behavior in their work.

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

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

The student must demonstrate that he / she has achieved the expected learning outcomes through the following assessment activities

Test 1: Specific work of product management (0% or 50% of the final grade).

The note of the product management work will be obtained mainly from the results obtained in the work presented in the final session, but will also take into account the evolution of this work and the active participation in the authorized sessions carried out on this work.

The student group can do this work individually or in small groups on one or several aspects related to product management. It should be about a real product and based on real data that you must get by yourself. This can be proposed by the teacher or by the students, needing in the latter case the approval of the first. This work must be defended in public before the end of the course.

In the case of not doing this work the student will concentrate this evaluation in the written exam.

Test 2: Continuous assessment (0% or 50% of the final grade).

This note will be obtained mainly from the evolution of the student in the theoretical or practical classes, especially in the resolution of small practical cases on real products of current world leaders companies that will be solved individually or in groups mainly in class.

In case of not exceeding this continuous evaluation, the student will concentrate this evaluation on the written exam. Test 3: Written exam (0% if the two previous tests have been passed, 50% if only one or 100% has been exceeded if none of the final mark has been passed as appropriate).

The exam will have to go the student in the case of not exceeding the specific work and / or continuous evaluation. This test of approximately 1.5 hours will consist of a theoretical part of test type on the knowledge seen in class that will account for 40% of the grade and a practical part in the resolution of cases similar to those solved in class that Will account for 60% of the note.

Conditioners.

The grade obtained in each of the three previous sections is saved during the current course, but not for subsequent courses.

It is necessary to approve two of the three previous parts of the subject in order to be able to mediate the final grade and therefore to approve the subject.

Note: Following the regulations of the University of Zaragoza in this respect, in the subjects that have systems of continuous or gradual evaluation, a global evaluation test will be programmed for those students who decide to opt for this second system.

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

#### 5.1. Methodological overview

The methodology followed in this course is oriented towards achievement of the learning objectives. It is based on active participation, case studies, teamwork etc. that favors the development of communicative skills and critical thinking. A wide range of teaching and learning tasks are implemented, such as lectures, practical activities, practice sessions, autonomous work, tutorials, and academic guidance.

Further information regarding the course will be provided on the first day of class.

## 5.2.Learning tasks

The course includes 7.5 ECTS organized according to:



<ul> <li>Lectures</li> </ul>	(1.2	<b>ECTS</b>	):	30	hours.
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- Practice sessions (1.2 ECTS): 30 hours.

- Guided assignments (1.42 ECTS): 35.5 hours.

- Autonomous work (3 ECTS): 75 hours.

- Tutorials (0.6 ECTS): 15 hours.

- Assessment (0.08 ECTS): 2 hours.

Lectures: the professor presents theoretical contents.

Practice sessions: they can involve discussion and presentation of case studies, practical work outside the classroom (field work or visits), and seminars.

Guided assignments: students will complete assignments, problems and exercises related to concepts seen in laboratory sessions and lectures. They will be submitted at the beginning of every practice sessions to be discussed and analyzed. If assignments are submitted later, students will not be able to take the assessment test.

Autonomous work: students do tasks such as autonomous study, reading of the course book, preparation of practice sessions and seminars, and summative assignments.

Tutorials: professors' office hours can be used to solved doubts and to follow-up students' work.

Assessment: final examination

## 5.3.Syllabus

Part One: Product Strategy Management (Week 1 to 10)

- 1. Current approach to business competitiveness.
- \* Product market strategy technology.
- \* Innovation and differentiation as competitive advantages.
- 2. Identification of market opportunities.
- \* Diagnostic and management tools.
- \* Portfolio of products. Spectrum.
- \* Product policy.
- \* Launch of products to the market.



Part Two: Brand Management (Week 11-14)

3. Design and Brand Values

4. Branding structure

Third part: Delivery and presentation of the Product Management Work (week 15)

# 5.4. Course planning and calendar

Part One: Management product strategy (1st to 10th week)

1. Current focus of business competitiveness

Product strategy - market - technology. Innovation and differentiation as competitive advantages

2. Identification of market opportunities.

Diagnostic tools and management. Product portfolio. Spectrum. Product Policy. Market launch product

Part Two: Brand management (11th to 14th week)

3. Design and brand values

4. Structure brands

Labor Delivery Management Product (15th week)

## 5.5.Bibliography and recommended resources

Kotler, Philip. El marketing se mueve : una nueva aproximación a los beneficios, el crecimiento y la renovación. Barcelona : Paidós, D.L. 2002

Serrano Gómez, F. Serrano Domínguez, C. Gestión, dirección y estrategia de producto ESIC Editorial.

Ana Isabel Jiménez (coord.), Haydeé Calderón García...[et al.] Dirección de productos y marcas. Bilbao : Editorial UOC, DL. 2004

Bassat, Luis. El libro rojo de las marcas : cómo construir marcas de éxito. 3ª ed. Madrid : Espasa, 2009

Fernández del Hoyo, Alfonso P. Innovación y gestión de nuevos productos: una visión estratégica y práctica . Madrid : Pirámide, D.L. 2009