Course guide
340088 - MARK-D7O32 - (Ang) Màrqueting i Producció

Unit in charge: Vilanova i la Geltrú School of Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR’S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2009). (Compulsory subject).

Academic year: 2023  ECTS Credits: 6.0  Languages: Catalan, Spanish

LECTURER

Coordinating lecturer: Colomer Mur, Josep Maria
Díaz Boladeras, Marta

Others: Colomer Mur, Josep Maria - Segura Castro, Nathalie - Abad Pequeño, Severino

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Transversal:
1. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
3. ENTREPRENEURSHIP AND INNOVATION - Level 2. Taking initiatives that give rise to opportunities and to new products and solutions, doing so with a vision of process implementation and market understanding, and involving others in projects that have to be carried out.
5. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
7. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.
4. EFFECTIVE USE OF INFORMATION RESOURCES - Level 1. Identifying information needs. Using collections, premises and services that are available for designing and executing simple searches that are suited to the topic.
TEACHING METHODOLOGY

Presentation-synthesis

In the sessions the teacher makes a summary of the topic. This presentation is intended as a guide work study students, with the function of introducing the item, propose material for study, clarify doubts and synthesis.

Each topic will be provided with:
- Power Point presentations used in class and other supplementary material will be available on the Digital Campus.
- Bibliography indicating specific location, preferring to material in electronic format.

Working activities and exercises

- Problems and Exercises for fixing the concepts introduced in the presentation.
- Approach of situations that allow the group builds a shared experience that will serve to advance in the understanding of content (eg, group dynamics, effective communication experiences.) They are based on experience different situations in which the experience serves as a study material.

Casework and articles

The work on cases or article will be based on questions raised by the professor. These works must to be delivered on date at the beginning of the session where will be discussed in class. The deadline to submit is specified in calendar. The teacher may show in the Digital Campus some of the best works delivered to be used as a reference.

The casework seeks to promote the following capabilities:
- Understanding of the situation presented and the ability to synthesize the most relevant issues
- Apply the concepts to practical cases.
- Capturing the complexity of real life situations, different points of view and various dimensions of the organizational and management issues
- Ability to exchange views and discuss, and ability to learn from the debate

Practices

Practices are held in groups of up to five members, to be established at the beginning of the course and will be maintained. Throughout the course there will be three practices where there are problems which will need to apply knowledge which is being acquired. These practices serve as the backbone of learning, following the principles of project-based learning. For each practice it will provided a dossier that shall include the objectives, description, date of delivery, and criteria assessment. Each practice will consist of a report and a presentation at pp.

Oral presentations

Each student will present oral argument at least once during the term. The days of presentation are announced at the beginning of the course. The day of the presentation the teacher a designate the groups that will carried out the presentation.

Small group and individual tutoring

The teacher will follow up the student progress and supervise their practices and work, providing feedback on their progress, the degree of achievement of the objectives of their work, giving directions for improvement.
LEARNING OBJECTIVES OF THE SUBJECT

Marketing:
1. Analyze, interpret and explain marketing functions within the practice of the profession of product design engineer
   1.1 Identify, from reading, news or practical cases, the elements of the environment that influence marketing decisions.
   1.2 Understand the interactions between marketing and production decisions and their influence on the professional practice of the product design engineering function.
2. Relate the information of the environment and the marketing that conditions the decisions of the strategic marketing.
   2.1 Interpreting market information of a company
   2.2 From real technical information, be able to choose the most appropriate marketing strategy.
   2.3 Know and understand the most common models of strategic marketing and its application.
2.4 Develop, based on the analysis and diagnosis of information, the most appropriate strategy of business marketing to specific situations that will be raised to students.
3. Know and understand the interaction between the function of product design engineering and the marketing of the company.
   3.1 Identify those aspects of marketing where product design engineering has more influence.
   3.2 Recognize and learn to manage the areas of the marketing mix where the function of product design engineering plays a more prominent role.

Production:
4.1 Know the function, costs and production process of the company.
4.2 Use techniques and tools to design a manufacturing plan at different levels.
4.3 Use basic techniques and tools for quality and safety management.

STUDY LOAD

<table>
<thead>
<tr>
<th>Type</th>
<th>Hours</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Hours large group</td>
<td>45,0</td>
<td>75.00</td>
</tr>
<tr>
<td>Hours small group</td>
<td>15,0</td>
<td>25.00</td>
</tr>
</tbody>
</table>

Total learning time: 60 h

CONTENTS

MQ_1 Integration of marketing and production decisions

Description:
Content

1.1. Marketing / production interaction.

1.2. Product and marketing engineering interaction

Specific objectives:
Understand the interrelation of the marketing and production functions and variables that affect the whole of the dynamics of the company, and how this dynamic influences the business decisions and their results.

Related activities:

Full-or-part-time: 1h
Theory classes: 1h
### MQ_2 From mass marketing to digital marketing

**Description:**
- 2.2 Market-oriented marketing
- 2.3 Marketing in the digital age

**Specific objectives:**
Understand how marketing has evolved throughout its history, what are its highlights and what are the current trends

**Full-or-part-time:** 3h
- Theory classes: 2h
- Practical classes: 1h

### MQ_3 Marketing in Industry 4.0

**Description:**
- 3.1 From industry 3.0 to 4.0
- 3.2 Marketing in Industry 4.0

**Specific objectives:**
Learn about the evolution and marketing towards digitalization.

**Full-or-part-time:** 1h
- Theory classes: 1h

### MQ_4 Centenials: the new marketing target group

**Description:**
- 4.1 Changes in the target group of marketing
- 4.2 Marketing and lifestyles
- 4.3 Lifestyle characteristics according to the generational profile
- 4.4 Millennials and Centenials, preferred target groups for marketing

**Specific objectives:**
To know the main tendencies that mark the studies of the lifestyles according to the generational profiles

**Full-or-part-time:** 1h
- Theory classes: 1h

### MQ_5 The era of omnichannel marketing

**Description:**
- 5.1 Evolution of sales channels: from multichannel to omnichannel.
- 5.2 The growth of digitalization in the relationship with the customer.
- 5.3 Marketing and Big Data.
- 5.4 Cases of good practices in omnichannel strategy.

**Specific objectives:**
Know the main omnichannel strategies that brands are developing.

**Full-or-part-time:** 1h
- Theory classes: 1h
**MQ_6 Creative evolution of marketing**

**Description:**
6.1 Advertising, the channel of communication between brands and the consumer.
6.2 Creative evolution of advertising media.

**Specific objectives:**
Learn about the evolution of the promotion strategies developed by brands

**Full-or-part-time:** 1h  
Theory classes: 1h

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**MQ_7 Digital Marketing Trends**

**Description:**
7.1 Main trends in digital marketing.
7.2 Marketing and Artificial Intelligence.
7.3 Impact of AI on marketing strategies

**Specific objectives:**
Learn about the effects and changes that have taken place in marketing with the introduction of AI.

**Full-or-part-time:** 4h  
Theory classes: 2h  
Practical classes: 2h

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**MQ_8 Marketing and packaging**

**Description:**
8.1 Packaging in relation to the product  
8.2 Packaging and brand image  
8.3 Evolution of packaging  
8.4 Packaging conditioning factors as a marketing tool  
8.5 Packaging trends  
8.6 Post-covid packaging21

**Specific objectives:**
Know and apply packaging strategies as an element of brand communication and customer relationship.

**Full-or-part-time:** 12h  
Theory classes: 8h  
Practical classes: 4h

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**MQ_9 Post-covid marketing**

**Description:**
9.1 Covid Impact Roadmap  
9.2 Some facts that may have changed consumption habits  
9.3 Marketing trends in the "new normal"

**Specific objectives:**
Know and analyze the impact that Covid is having on marketing strategies and how brands are dealing with the new situation.

**Full-or-part-time:** 1h  
Theory classes: 1h
**PRO_10 Organization Of the economic activity**

**Description:**
Contents:

10.1. Definition of processes.
10.2. Conceptual classification of processes
   - Operating processes.
   - Support processes.
   - Strategic processes.
5.3. Internal Value System.
5.4. External Value System.
5.5. Diagramming? Of processes.
5.6. Added value and waste

**Specific objectives:**
Understanding how the needs of customers are based on the processes that maximize the VA.

**Full-or-part-time:** 1h
Theory classes: 1h

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**PRO_11 Resources**

**Description:**
Types of processes
Production time, delivery time, performance and quality.
Calculation of the number of resources required
How to dispose the resources in the most optimal way
Stock and waiting calculations.
Creation of layouts.
Methodology of the 5S.

**Specific objectives:**
Once the processes are identified, choose them and have them in the most efficient and flexible way

**Full-or-part-time:** 1h
Theory classes: 1h

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**PRO_12 Total Quality**

**Description:**
Model Jidoka.
AMFE of processes.
A3 Report.

**Specific objectives:**
Understanding how modern quality is based on making it always good, instead of controlling, and learning from problems, instead of simply correcting them

**Full-or-part-time:** 1h
Theory classes: 1h
**PRO_13 Perfection. Quality Continuous Improvement**

**Description:**

**Contents:**

13.1. Organization of the workplace.
- S’S
- Visual measurements
13.2. Jidoka
- Jidoka Cases
- Definition
13.3. Quality
- At what point in the process should quality be controlled and verified?
- Quality at the source
- Definition of quality.

**Full-or-part-time:** 1h
Theory classes: 1h

**PRO_14 Quality management in the Workplace**

**Description:**

**Contents:**

14.1. Quality definition
- Efficient process management
- Definition
- Implementation stages
- Models
14.2. Implementation of quality in productive processes
- Product planning
- Product design
- Design processes
- Control of production
- Product control
14.3. Modal Analysis of faults and effects
14.4. Total quality models
- EFQM
14.5. Tools for the analysis and improvement of processes
- Ishikawa
- Pareto diagram
- Histogram
- Dispersion
14.6. The statistical control of processes. SPC.
- Control charts
- Calculation of the capacity of a process

**Full-or-part-time:** 1h
Theory classes: 1h
**PRO_15 Lean Startup**

**Description:**

Contents:

15.1. Startup companies
- Which are?
- Are traditional business models valid? Needs and particularities not covered

15.2. Lean StartUp Method
- Origin of the Lean StartUp Method
- 'What is the Lean StartUp Method?'
- Characteristics, methodology and approach
- The focus on the client. Customer Development
- The PMH (Viable Minimum Product) and the Early Adopters the pivoting and the experiments to validate the Hypotheses
  - The importance of the metrics in the decision making Generation of the Business Model
- The influence of Design Thinking

**Specific objectives:**

Know the latest tendencies in horizontal management and fast response to the market.

**Full-or-part-time:** 1h

Theory classes: 1h

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**GRADING SYSTEM**

In the evaluation of the student will be considered both the work done in group and the achievement of the contents assessed in individual written tests (exams). These exams will consist of one part of short questions or test type, and another of open questions or development. The students will also have a note obtained from the oral presentation of the practice, and one according to their attendance and contributions in the theoretical and practical classes.

Final Grade = Marketing Mark * 0.5 + Production Mark * 0.5
Marketing Mark = Exams Mark * 0.5 + Assignments mark * 0.4 + Oral presentation and participation mark * 0.1
Production Mark = Exams Mark * 0.5 + Assignments mark * 0.4 + Oral presentation and participation mark * 0.1

Students who may be eligible for reevaluation according to academic regulations may improve on a written exam only the corresponding mark "Exams Mark", which has a weight of 50% on the final grade of the subject, as indicated in the formula above.

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**BIBLIOGRAPHY**

**Basic:**