320144 - DGC - Graphic Design and Communication

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 717 - EGE - Department of Engineering Presentation
Academic year: 2019
Degree: BACHELOR'S DEGREE IN INDUSTRIAL DESIGN AND PRODUCT DEVELOPMENT ENGINEERING (Syllabus 2010). (Teaching unit Compulsory)
ECTS credits: 6 Teaching languages: Catalan

Teaching staff
Coordinator: Jordi Voltas Aguilar
Others: Rosó Baltà Salvador

Degree competences to which the subject contributes

Specific:
1. DES: Ability to design and project in different situations, effectively and efficiently with different agents involved in the process of design and industrial development.
2. DES: Ability to take decisions related to the graphic representation of concepts.
3. DES: Ability to apply specific methods, techniques and instruments for each form of technical drawing.

Transversal:
6. 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.
7. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 2. Applying sustainability criteria and professional codes of conduct in the design and assessment of technological solutions.
8. 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.
9. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
10. EFFECTIVE USE OF INFORMATION RESOURCES - Level 2. Designing and executing a good strategy for advanced searches using specialized information resources, once the various parts of an academic document have been identified and bibliographical references provided. Choosing suitable information based on its relevance and quality.
11. 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.
Teaching methodology

- The subject will consist of theoretical sessions which content will be linked to the project being worked on. In these exhibition sessions, the theoretical bases of the subject, concepts, methods and results will be introduced, illustrating them with convenient examples to facilitate their understanding.

- The practical classes will be based on laboratory-based projects focused on the presentation of concepts, techniques and procedures, combined with the resolution of exercises and practical work. Part of this learning will be cooperative and will be based on projects (project based cooperative learning), oriented to the accomplishment of problems and evaluable projects in team. The transversal work of the course will be focused on the PBL group work programmed jointly with the subject Design and Product I. This work will pick up the majority of concepts treated during the course in the two subjects.

- A part of the work that involves the subject will be carried out in an autonomous and individual way of studying, preparing and carrying out exercises. Students, independently, will have to study to assimilate the concepts, solve the exercises proposed either manually or with the help of the computer.

- Use of the tools of the ATENEA platform and other tools (web 2.0) hosted externally, in order to encourage collaborative learning.

Learning objectives of the subject

- Develop, systematize and structure the creative process.
- Introduce concepts, techniques and methodologies of the graphic design and communication sector.
- Know and practice the techniques of graphic representation as a means to favor the expression and transmission of ideas in the
  - industrial design processes.
  - Facilitate and enhance the analysis capacity.
  - Develop the ability to imagine, create and represent new product ideas based on graphic design.
  - Develop the ability of visual perception of the environment through observation in order to interpret, imagine, create
    and represent using graphic language.
  - Define and manage visual development projects.
- Provide knowledge and develop skills to apply the theory of color, typography, image and composition both in the
  design and in the representation and the final image of the product.
- Become familiar with and use the technical language of the graphic design sector.

Study load

<table>
<thead>
<tr>
<th>Study load</th>
<th>Total learning time: 150h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours large group:</td>
<td>30h</td>
</tr>
<tr>
<td>Hours medium group:</td>
<td>0h</td>
</tr>
<tr>
<td>Hours small group:</td>
<td>30h</td>
</tr>
<tr>
<td>Guided activities:</td>
<td>6h</td>
</tr>
<tr>
<td>Self study:</td>
<td>84h</td>
</tr>
</tbody>
</table>
### UNIT 1. Introduction to graphic design and visual communication

**Learning time:** 10h  
Theory classes: 2h  
Laboratory classes: 2h  
Self study: 6h

**Description:**  
Introduction to graphic design and visual communication.  
The brand identity and branding

**Related activities:**  
AV1: Visual identity creation project.

**Specific objectives:**  
Understand the basic principles of graphic design and visual communication.  
Familiarize yourself with brand design.  
Know and use basic resources.

### UNIT 2. Design Project I and Editorial design

**Learning time:** 10h  
Theory classes: 2h  
Laboratory classes: 2h  
Self study: 6h

**Description:**  
Introduction to Editorial Design  
Print systems  
Compositions and grid  
Techniques and methodologies in the design project: The Brief and the moodboard

**Related activities:**  
AV2: Editorial project

**Specific objectives:**  
Understand the basic principles of Editorial Design  
Know the different printing systems  
Become familiar with the use of the compositional grid  
Know and become familiar with the brief as a requirements document.  
Become familiar with the use of the moodboard as an aesthetic definition technique
### UNIT 3. Image, Photography and Typography

**Description:**
- Introduction to the image and photography
- The plans of the image
- The image as a communication element
- Introduction to typography
- Classifications and styles
- Characteristics of typography
- The use of typography as a communication element

**Related activities:**
- AV2: Editorial Project

**Specific objectives:**
- Become familiar with the image / photography as an element of communicational content
- Use the tools of photo editing and color correction.
- Use image editing to integrate a product in a context.
- Identify and justify what typography to use in each case.
- Typographic treatment, vectorization of the text, justification and other effects.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h

### UNIT 4. Design Project II, Advertising Design and Color

**Description:**
- Introduction to advertising design.
- Analysis of advertising channels.
- Characteristics of the language.
- Visual rhetoric.
- Techniques and methodologies in the design project: The brand manual
- Introduction to color
- Properties of color
- Color models
- The psychology of color and how it is used in visual communication

**Related activities:**
- AV3: Generation of advertising pieces

**Specific objectives:**
- Work digital resolutions.
- Work on the adequacy of the language and the message with the target audience.
- Know the brand manual as a design definition tool.
- Know the tools for the treatment of color and the generation of effects through color.
- Use of resources for the creation of color palettes and how to create a consistent color palette.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h
# UNIT 5. Infographics and information synthesis

**Learning time:** 10h  
Theory classes: 2h  
Laboratory classes: 2h  
Self study: 6h

**Description:**  
Introduction to infographics as a presentation system for a product.  
Synthesis of information.

**Related activities:**  
AV4: Generation of graphic elements for the presentation of an industrial product

**Specific objectives:**  
Identify relevant information for the target audience and synthesize the message.  
Organize the information in a visual way to generate attraction in the reader.

---

# UNIT 6. Semiotics and iconography

**Learning time:** 10h  
Theory classes: 2h  
Laboratory classes: 2h  
Self study: 6h

**Description:**  
Introduction to semiotics and visual representation systems  
Use of iconography as a communicative and synthesis element  
Analysis of the characteristics and types of icons

**Related activities:**  
AV4: Generation of graphic elements for the presentation of an industrial product

**Specific objectives:**  
Develop skills in the use of the vector trace  
Use of iconographic resources for the creation of the message
## UNIT 7. Design project III

**Description:**
Techniques and methodologies in the design project: Case Studies and Flow Diagram.

**Related activities:**
AV5: Interface design for the product

**Specific objectives:**
- Identify the functions of an object and categorize them.
- Draw the functional diagram of an object.
- Identify cases of use of the object.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h

## UNIT 8. Design of product interfaces

**Description:**
Analysis of product interfaces and the elements that compose them.
Human - Product - Interaction: Interaction principles

**Related activities:**
AV5: Interface design for the product

**Specific objectives:**
- Identify the controls and interaction elements of the products and justify their choice.
- Know advanced tools: transformations to incorporate screen printing to the object.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h

## UNIT 9. The packaging as a communicational element of the product

**Description:**
Introduction to packaging as a communicative strategy for the product.
Analysis of the characteristics of the packaging and its link with the brand.

**Related activities:**
AV6: Packaging and labeling design

**Specific objectives:**
- Identify the message / communicative intention of the packaging.
- Know the elements that characterize a container or labeling.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h
### UNIT 10. Packaging design and gammes

**Description:**
Product labeling
Application of color, typography, reticle ... to packaging.
Creation of gammes

**Related activities:**
AV6: Packaging and labeling design

**Specific objectives:**
Develop the elements that characterize a container or label applying the knowledge acquired throughout the course.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h

### UNIT 11. Design project IIII

**Description:**
Techniques and methodologies in the design project: The benchmark and the analysis of market communication trends

**Related activities:**
PBL Integrated with the subject of Design and Product I

**Specific objectives:**
Know the procedure to carry out a market study as the first point to define a communicative and visual strategy of a product.

**Learning time:** 10h
- Theory classes: 2h
- Laboratory classes: 2h
- Self study: 6h
### UNIT 12. The experience of packaging

| Description: | The experience through packaging  
|              | Packaging as an interactive element |
| Related activities: | PBL Integrated with the subject of Design and Product I |
| Specific objectives: | Trace the experience that the packaging brings to the consumer. Understand several ways to interact with the packaging |

**Learning time:** 10h  
- Theory classes: 2h  
- Laboratory classes: 2h  
- Self study: 6h

### UNIT 13. Trends in graphic design and creativity

| Description: | Historical review of trends in the field of graphic design.  
|              | Analysis on the use of trends in visual communication.  
|              | Analysis of current trends in graphic design and communication.  
|              | Breaking the rules and thinking outside the box: case studies analysis. |
| Related activities: | PBL Integrated with the subject of Design and Product I |
| Specific objectives: | Identify the trends that characterize the current aesthetic in the field of graphic design. Ways to encourage creative thinking. |

**Learning time:** 10h  
- Theory classes: 2h  
- Laboratory classes: 2h  
- Self study: 6h
Planning of activities

<table>
<thead>
<tr>
<th>(ENG) PROVA PARCIAL</th>
<th>Hours: 3h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 3h</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>Conducting a test that evaluates the contents included in the first partial.</td>
</tr>
<tr>
<td><strong>Support materials:</strong></td>
<td>The one suitable for the practice of the subject</td>
</tr>
<tr>
<td><strong>Descriptions of the assignments due and their relation to the assessment:</strong></td>
<td>Evaluable test</td>
</tr>
<tr>
<td><strong>Specific objectives:</strong></td>
<td>Exercising in practice by adding a temporary component</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(ENG) PROVA FINAL</th>
<th>Hours: 3h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 3h</td>
</tr>
<tr>
<td><strong>Description:</strong></td>
<td>Carry out a test that evaluates the contents included in the first and second partial.</td>
</tr>
<tr>
<td><strong>Support materials:</strong></td>
<td>The one suitable for the practice of the subject</td>
</tr>
<tr>
<td><strong>Descriptions of the assignments due and their relation to the assessment:</strong></td>
<td>Evaluable test</td>
</tr>
<tr>
<td><strong>Specific objectives:</strong></td>
<td>Exercising in practice by adding a temporary component</td>
</tr>
</tbody>
</table>

Qualification system

A model of continuous evaluation will be applied with the basic purpose of weighing both the autonomous work and the work in team from students.

The evaluation of acquisition of knowledge, skills and abilities will be carried out from:
- Activities and scheduled deliveries of the parties ........................................... 50%
- First individual control ................................................................. 15%
- Second individual control ............................................................... 15%
- Report and oral presentation of a group work ........................................ 20%

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.
If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.
Bibliography

Basic:


