

320141 - EA - Artistic Expression

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: Voltas Aguilar, Jordi
Others: Quin Voltas, Josep Oriol

Degree competences to which the subject contributes

Specific:

9. DES: Knowledge of the types of design and products, and their presentation.
10. DES: Ability to apply specific methods, techniques and instruments for each form of technical drawing.
11. DES: Ability to take decisions related to the graphic representation of concepts.
12. DES: Ability to design and project in different situations, effectively and efficiently with different agents involved in the process of design and industrial development.

Transversal:

1. 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.
2. 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.
3. TEAMWORK - Level 2: Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
4. 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.
5. SUSTAINABILITY AND SOCIAL COMMITMENT - Level 2: Applying sustainability criteria and professional codes of conduct in the design and assessment of technological solutions.
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.
13. SELF-DIRECTED LEARNING - Level 3: Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.

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Teaching methodology

Methodology is based in practical and theoretical classes. A theoretical introduction will be done at the beginning of every class. This introduction will explain the projects.

Pencil, graphite, ink, colour materials and computer programs will be used to represent objects and personal creations during the course.

The Practice Based Learning consists of improving image manipulation and the use of tools, techniques, materials, processes and specific skills.

The first seven weeks, freehand exercises will be done, and the seven last week students will do a project (including freehand exercises and using computer programs).

Learning objectives of the subject

To familiarize students with the knowledge of image perception and different elements and laws that forms the image perception.

To learn the qualities of each visual element and its implementation.

To boost skills, ingenuity and ability to analyze an industrial product and communicate it with visual language. Application of colour, texture and light in artistic expression.

To know the planning process in industrial design and apply the right techniques.

To develop the ability to analyze and draw correctly.

Study load

Total learning time: 150h	Hours large group:	30h	20.00%
	Hours medium group:	0h	0.00%
	Hours small group:	30h	20.00%
	Guided activities:	0h	0.00%
	Self study:	90h	60.00%

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Content

<p>TOPIC 1: Visual Perception</p>	<p>Learning time: 9h Theory classes: 2h Practical classes: 2h Self study : 5h</p>
<p>Description: Image as language Shape as an object representation Image as the representation of shape Visual language syntax Feeling, intuition, creativity in design practice Methodology for design creativity</p> <p>Related activities: Av. 1 Make photographs of daily situations: reflections on water, metal and glass.</p> <p>Specific objectives: Empowering the development of creativity</p>	
<p>TOPIC 2: Type of materials (working tools) and its use</p>	<p>Learning time: 9h Theory classes: 2h Practical classes: 2h Self study : 5h</p>
<p>Description: · General description of different techniques, instruments, materials pencil, felt tip pen, pen, and brushes · Paper: type, quality, presentation and formats · Auxiliary instrumentation</p> <p>Related activities: Av. 2 Analysis of consumer products</p> <p>Specific objectives: Familiarize the student in the use of tools, processes and materials</p>	

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<p>TOPIC 3: Perspective</p>	<p>Learning time: 30h Theory classes: 5h Practical classes: 5h Self study : 20h</p>
<p>Description: Axonometric system Orthogonal parallel projection, Isometric. Dimetric, Trimetric... Perspective elementary bodies. Shadows on the conical perspective. Light and shadow. The size and depth depending on the light. Fundamental forms. Surfaces. Intersections.</p> <p>Related activities: Av. 3 Analysis of photographs taken at Av. 1</p> <p>Specific objectives: To apply the acquired knowledge and to reinforce the practice of the systems of representation</p>	
<p>TOPIC 4: Analyse shapes</p>	<p>Learning time: 30h Theory classes: 5h Practical classes: 5h Self study : 20h</p>
<p>Description: · Introduction to the analysis of different shapes · Geometric construction of the objects · Find basic shapes of different objects</p> <p>Related activities: Av. 4 To analyze pictures appearing in different adds.</p> <p>Specific objectives: Develop the observation of forms and their dimensional relationships</p>	



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TOPIC 5: Object representation	Learning time: 30h Theory classes: 5h Practical classes: 5h Self study : 20h
<p>Description:</p> <ul style="list-style-type: none">Design as a processSketchesAnalytical drawingDescriptive drawingLaceProportion and scaleThe human proportionCompositionThe frameTexturesExpressive possibilitiesTexture as a visual and graphic appealQualities of the surfaceProcesses for the production of textures: photographic slides, frames and other techniquesQualities of surfacesPsychological effects of texturesRepresentative materialsTechnical aspects of textures. Materials, techniques and process <p>Related activities:</p> <ul style="list-style-type: none">Av. 5 Layout of the different components of a mechanical set. <p>Specific objectives:</p> <ul style="list-style-type: none">To deepen in the expressive possibilities of the representation of objects	

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<p>TOPIC 6: Colour</p>	<p>Learning time: 22h Theory classes: 1h Practical classes: 1h Self study : 20h</p>
<p>Description:</p> <ul style="list-style-type: none"> Physical Nature Additive and subtractive mixtures. Light colour, colour field. Ranges and chromatic modulations Shade, value, saturation Colour ranges Harmony and contrast Colour and culture. Colour and symbol Perceptive. Aerial perspective Colour as a plastic material (pigment, binder and diluents in different techniques) Materials textures. Physical texture and visual texture <p>Related activities:</p> <ul style="list-style-type: none"> Av. 6 Presentation of a project of own creation <p>Specific objectives:</p> <ul style="list-style-type: none"> Practice and develop skills in the realization and presentation of ideas 	

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Planning of activities

(ENG) PROVA PARCIAL	Hours: 3h Theory classes: 3h
<p>Description: Making a statement where they intervene the different objectives and contents of the first part</p> <p>Support materials: The one suitable for the practice of the subject</p> <p>Descriptions of the assignments due and their relation to the assessment: Evaluable test</p> <p>Specific objectives: Exercising in practice by adding a temporary component</p>	

(ENG) PROVA FINAL	Hours: 3h Theory classes: 3h
<p>Description: Completion of a statement where they intervene the different objectives and contents of the first and second partial</p> <p>Support materials: The one suitable for the practice of the subject</p> <p>Descriptions of the assignments due and their relation to the assessment: Evaluable test</p> <p>Specific objectives: Exercising in practice by adding a temporary component</p>	

Qualification system

The portfolio including all the activities done during the first half course will be presented during the week of exams. The unsatisfactory results of the practices can be redirected through the delivery (during the course and before the end of December) of repeated exercises to improve grade. The grade of the repeated practices will replace the note that you want to improve. The grade obtained by the application of the renewal will replace the initial grade as long as it is higher. Activities can be passed only if the professor supervises them in class. Creativity will be valued.

Weekly Activities: 50%
Project along course: 30%
Individual exam: 10%
Individual exam: 10%

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.

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Regulations for carrying out activities

1. Classes are practical and theoretical.
2. Every student has to bring their own material.
3. Theoretical content will be done during theoretical classes and also in practical classes.
4. Some activities will be done during the first part and last part of the course.
5. All exercises and assistance (during all the course) is required for evaluation of the subject
6. Practical exercises can be finished outside class time. Exercises that have not been supervised by the professor will not be approved.
7. Students will work with A4 paper size (unless some particular activities)

Bibliography

Basic:

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