Universidad Zaragoza

Academic Year/course: 2024/25

25888 - Photography, Composition and Image Edition

Syllabus Information

Academic year: 2024/25
Subject: 25888 - Photography, Composition and Image Edition
Faculty / School: 110 - Escuela de Ingeniería y Arquitectura
Degree: 558 - Bachelor's Degree in Industrial Design and Product Development Engineering
ECTS: 6.0
Year: 4
Semester: First semester
Subject type: Compulsory
Module:

1. General information

The subject aims to complement the training of students in terms of knowledge of the communicative possibilities of the industrial product and the image created from it.

Knowledge about the presentation of industrial products requires a series of visual communication skills, such as narrative, technical and creative management, gaining relevance both in the capture and editing of images.

With this objective in mind, we propose the integration of digital tools that provide images that respond to the objectives set, while at the same time have an outstanding aesthetic and informational component.

2. Learning results

- Understand the operation of a camera and the basic accessories required.
- Be capable of capturing still images using the optimum combination of photographic equipment and accessories.
- Properly control camera settings and parameters.
- Be able to obtain correct images under different lighting conditions, both natural and artificial.
- Know how to obtain photographic images with the appropriate quality for later use.
- Master the basic concepts related to the composition and manipulation of photographic images.
- Know the most common formats, manipulation tools and reproduction techniques for photographic images.
- Be capable of advanced and appropriate manipulation of photographic images.
- Be able to make use of the full potential of photographic images in their professional activity.
- Master the basic concepts related to the composition and manipulation of digital images.
- Know the most common formats, manipulation tools and reproduction techniques for photographic images.
- Be capable of advanced and appropriate manipulation of photographic images.
- Be able to make use of the full potential of photographic images in their professional activity.

3. Syllabus

Static imaging

- Origins and evolution of photography. Genres and styles.

- Image narrative and photographic aesthetics. Framing and composition, angulation, depth of field, etc.

- Photographic cameras and parameter control. Formation of the photographic image. Camera formats and types. Diaphragm and f-numbers. Shutter speed. ISO/ASA.

- Industrial photography.

- Lenses, objectives and optical filters.

- Natural lighting. Artificial lighting. Characteristics and expressive possibilities.

- File types.

Image composition and editing

- The human visual system: perception of images.

- Components of a digital image editing system: digitalization, manipulation, storage, and reproduction.

- High dynamic range: problem, formats, tone reproduction and manipulation.

- Color representation. Representation of transparency.

- Static digital image. Treatment: Basic operations. Interpolation. Histograms. Filters. Compression of images. Formats.

- Image integration and postproduction techniques: color correction, use of layers, and other digital effects.
- New editing and image generation techniques: Deep learning models in photography.

4. Academic activities

Classroom activities (lectures, cases, and laboratory practices): 60 h

Carrying out practical application or research work: 45 h

Personalized teacher-student mentoring: 5 h

Study and personal work: 30 h

Assessment tests. 10 h

5. Assessment system

Students will be able to pass the subject by passing a continuous assessment that will be evaluated out of 10 points according to the following proportion:

- Directed work: 40%
- Performance and deliveries corresponding to the practical sessions: 40%
- Written test: 20%

To pass the course in continuous assessment, a minimum weighted grade of 5/10 and a grade higher than 4/10 must be obtained in each of these three parts and for each of the two modules of the subject (imaging and image editing). In case of not obtaining the minimum grade required in any of the three parts, the grade in the subject will be the lowest value between the weighted average and 4. Likewise, in order to pass the subject by means of continuous assessment it is an essential requirement to hand in all the practices and assignments established in due date and form.

* Erasmus students who opt for continuous assessment must:

- Hand in all practices and assignments on the established date and in the established form.
- Show the requested evidence of authorship of the work.

Note: It is obligatory that the practices of the subject contain all the solved sections that are indicated so that can be passed.

The student who does not opt for the evaluation procedure described above, does not pass these tests during the teaching period, or wants to improve his or her grade, will have the right to take a global test that may include: a practical theoretical exam, along with one or more projects with oral defense defined specifically for this evaluation modality.

6. Sustainable Development Goals

4 - Quality Education
10 - Reduction of Inequalities