

25888 - Photography, Composition and Image Edition

Syllabus Information

Academic Year: 2020/21

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

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. This is a course with an emphasis on practical learning. In lectures, the basic concepts that are necessary for adequate control of the digital camera, as well as the bases of image editing techniques, will be presented. Laboratory practice sessions will allow the student to master camera control, the use of objectives, filters, accessories, editing software, digital image composition, and the realization of a final course project.

The six credits of the course correspond to 150 hours of student work, which are organized as follows:

- Lectures: 30 hours.
- Laboratory practice: 40 hours.
- Course projects related to practical applications or research: 45 hours.
- Personalized professor-student tutoring: 10 hours.
- Personal work and study: 15 hours.
- Assessment, including evaluation procedures and tests: 10 hours.

4.2.Learning tasks

The program offered for the student to obtain the expected results includes the following activities:

1. Lectures and theory session.

2. Laboratory practice.

4.3.Syllabus

The course will address the following topics:

- Module 1. Static image acquisition.
 - Origins and evolution of photography. Genres and styles.
 - Photographic cameras and parameter control. Image formation in photography. Formats and camera types. Aperture and f-numbers. Shutter speed. ISO/ASA.
 - Industrial photography.
 - Lenses and optical filters.
 - Natural illumination, artificial illumination. Characteristics and possibilities of expression.
 - File formats.
 - Image narrative and aesthetics in photography. Framing, depth of field, etc.
- Module 2. Image compositing and editing
 - The human visual system: perception of images.
 - Components of a digital image editing system: digitalization, manipulation, storage, and reproduction.
 - High dynamic range: the problem, formats, tone mapping, and manipulation.
 - Color representation. Transparency representation.
 - Static digital image. Treatment: Basic Operations. Interpolation. Histograms. Filters. Image Compression. Formats.
 - Techniques for image integration and postproduction: color correction, use of layers, and other digital effects.

4.4.Course planning and calendar

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Module 1	X	X	X	X	X	X	X							
Theory	X	X	X	X	X	X	X							
Practice	X	X	X	X	X	X	X							
Module 2								X	X	X	X	X	X	X
Theory								X	X	X	X	X	X	X
Practice								X	X	X	X	X	X	X

4.5.Bibliography and recommended resources