DIGITAL LABORATORY I

Degree in Industrial Design

Code: 11809

Main Scientific Area: Audiovisuais

Lecturer: Maria da Graça Fernandes Pinheiro da Silva

Language of Instruction: Portuguese

Regime: S1

Contact Hours: 0h Total Workload: 0h

ECTS: 5,0

Objectives

This course introduces students to the study of various means of capture, manipulation and production of analogand digital imaging.
It encouraged the use of integrated photographic image in the development of projects related to product design inan image recording in a studio context, indoor and outdoor. To develop analysis and production of the image as aprivileged element of communication.

Learning Outcomes

Through photography and the exploration of digital image processing students acquire theoretical and practicalskills in the development of digital images directed for industrial design projects. The exercises and the contentsallow students to acquire advanced skills in capturing and image manipulation.

Course Contents

Analog and digital cameras;
Lenses and accessories;
Light and exposure;
Field depth;
Diaphragm;
Obturator;
scenography;
Shooting techniques;
Composition;
Scale and Perspective;
Framework and content;
Studio Photography;
Outdoor Photography;
Digital image treatment;
Color values;
Digital painting techniques;

Digital image processing tools;
Post-production digital image;
Composition - relationship between image and text (scales, proportions, balance, visual weights, visual hierarchies)

Recommended Bibliography

ARNHEIM, Rudolf, Arte e Percepção Visual, uma Psicologia da Visão Criadora, Edições THOMSONPIONEIRA, Brasil, 1998.
BAURET, Gabriel, A Fotografia: Arte e Comunicação, Edições 70, 2006.
DONDIS, D.A, Sintaxe da linguagem visual: introdução ao alfabeto visual, Martins Fontes, São Paulo, 2003.
FAULKNER, Adrew.. Adobe Photoshop CC 2018 release: classroom in a book. 2018.
LANGFORD, Michael, Fotografia Básica: Lisboa. DinaLivro, 2002.
LEITÃO, Carlota; BRUM Pedro, Luzes Câmara Ação, 2013.
SANTOS, Joel, Fotografia – Luz, Exposição, Composição, Equipamento, Centro Atlântico, Lda., 2010.

Learning and Teaching Methods

Through photography and the exploration of digital image processing students acquire theoretical andpractical skills in the development of digital images directed for industrial design projects. The exercises and thecontents allow students to acquire advanced skills in capturing and image manipulation.

Assessment Methods

Operating Regime
The curricular unit will operate in a presential regime.
Learning Assessment
The evaluation regime on this curricular unit is the continuos evaluation one (according to point 1 of article 3rd ofRACC from ESD).
According to the new regulation of ESD (RACC), the students are obligated to frequent 75% of the lessons, to beevaluated on continuous evaluation regime.
The evaluation integrates the following evaluation learning elements with the weighting:
Proposal 01 (studio photography) X 0.30 + Proposal 02 (Composition and graphic treatment) X 0.35 + Weekly exercises X 0.25 + Student presence and participation X 0.10
Evaluation in exam season
This curricular unit does not allow the exam (according to point 4th of RACC from ESD).
Evaluation in special season
Only have access to this season those who are in special frequency regime (according to secction I, article 135th and point 5th, article 209th, of the Academic Regulation of IPCA).
To have access to the special season exam the student must have a minimum grade of 8 values and 75% ofpresences in class, except the foreseen exceptions in the Academic Regulation.
The evaluation in this special season integrates the following elements of the learning's evaluation with theweighting:
Exercises (photography) x 0.15 + Proposal for product x 0.20 + Proposal (Composition and graphic treatment) X0.50 + Presentation and defense X 0.15
The final grade result of the following weighting: minimal grade the frequency X 40% + 60% the learning evaluation.
GRADE IMPROVEMENT

In this curricular unit, the grade improvement functions through continuos evaluation (according to point 2nd of thearticle 6th of RACC from ESD)
The evaluation integrates the following evaluation learning elements with the weighting:
Exercises (photography) x 0.15 + Proposal for product x 0.20 + Proposal (Composition and graphic treatment) X0.50 + Presentation and defense X 0.15