INSTITUTO POLITÉCNICO DE BRAGANÇA

Course Unit	Digital Drawing 2d			Field of study	Design								
Bachelor in	Art and Design - Minor in Design			School	School of Education								
Academic Year	2022/2023	Year of study	1	Level	1-1	ECTS credits	5.0						
Type	Semestral	Semester	1	Code	9898-662-1101-00-22								
Workload (hours)	135	Contact hours	T -	TP 18	PL 20	TC -	S -	E -	OT 16	O -			

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s): Marco António Pereira da Costa, Jacinta Helena Alves Lourenço Casimiro da Costa

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Understand the computer as a creative tool in the fields of Art and Design.
2. It uses specific softwares for the technical domain and understanding of the different natures of the digital image, namely vectorial and bitmap.
3. Conceives and edits in a normative and creative way, images for application in aesthetic and / or projectual contexts.

Prerequisites

Before the course unit the learner is expected to be able to:
No prerequisite required.

Course contents

1 - The computer at the service of Art and Design. 2 - Vector Drawing. 3 - Bitmap painting.

Course contents (extended version)

1. The computer at the service of Art and Design.
   - Brief history of the computer as a creative tool.
   - Socio-cultural importance of digital media.
   - Fields of art and digital design.
2. Vector Drawing.
   - Study of the software Adobe Illustrator.
   - The workspace, menus, and tool palettes.
   - Document Setup Dimensions and definitions.
   - Vector drawing: Principles and concepts, tools and techniques of drawing.
   - Color use for screen and for printing.
   - Text formatting. Principles of composition and typographical rigor.
   - Construction and use of grids. Paging tools and techniques.
   - Import and use of Bitmap images: Dimensions, resolution, frames.
3. Bitmap painting.
   - Study of the software Adobe Photoshop.
   - The workspace, menus, and tool palettes.
   - Notions and basic concepts about the pixel.
   - Image size and resolution. Digital image formats (Print / screen).
   - Image compression genres.
   - Image Modes (Use and mastery of color channels.
   - Painting and drawing tools and techniques.
   - Creation, manipulation and treatment of image. Creation of synthetic and simulation images.
   - Text Usage and Composition (“Bitmap Text” vs “Vector Text”) Use of vector elements.
   - Preparation of documents for printing (Digital, Offset) and for the web.

Recommended reading

1. SMITH, Jennifer; AGI CreativeTeam. (2013) Adobe Illustrator CC Digital Classroom, John Wiley & Sons, Inc. ;
2. SMITH, Jennifer; AGI CreativeTeam. (2013) Adobe Photoshop CC Digital Classroom, John Wiley & Sons, Inc. ;
3. CERUZZI, Paul E. (2012) Computing: A concise history. The MIT Press, Cambridge, Mass. ;
4. GIANNETTI, Claudia (2002) – Estética Digital. L'Angelot, Barcelona;
5. 5. Manovich, Lev (2010) Software Culture. Edizioni Olivares, Milano;

Teaching and learning methods

1 - Presentation of theoretical contents. 2 - Launch of Proposals for individual and / or group Theoretical-Practical works. 3 - Follow up and criticism on the development of the works. 4 - Analysis and public discussion of the theoretical-practical works presented.

Assessment methods

1. CONTINUOUS EVALUATION - (Regular, Student Worker) (Final)
   - Practical Work - 50%
   - Intermediate Written Test - 30%
   - Development Topics - 20%
2. ALTERNATIVE AND SPECIAL EXAMS - (Regular, Student Worker) (Supplementary, Special)
   - Practical Work - 40%
   - Practical Work - 60% (Nº. 4 art. 7 of the Freq. and Eval. Regulations. Classification obtained in continuous evaluation.)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Marco António Pereira da Costa	Helena Maria Lopes Pires Genésio	António José Santos Meireles	Carlos Manuel Costa Teixeira
02-02-2023	02-02-2023	06-02-2023	07-02-2023