

Course Unit	Descriptive Geometry		Field of study	Visual Arts/Design	
Bachelor in	Art and Design - Minor in Design		School	School of Education	
Academic Year	2023/2024	Year of study	1	Level	1-1
Type	Semestral	Semester	1	ECTS credits	5.0
Code	9898-662-1103-00-23				
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) **Luís Manuel Leitão Canotilho**

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. He knows the different phases of historical evolution in terms of the representation of forms through geometry;
2. Acquires ability to represent three-dimensional shapes in two-dimensional space;
3. It uses the flat geometry and geometry of space as a possible interpretation of nature and basic principle for the organization of forms in a composition;
4. Uses the central or conical perspective as a form of representation through the normal use of rigorous and also free drawing;
5. It acquires the necessary capacity of three-dimensional visualization in the space;
6. It acquires the communicative capacity to perceive and or to transmit to others, with precision and clarity, the visualization of bi or three-dimensional forms through rigorous projections.
7. Can graphically represent conceptual or real graphic forms suitable for the execution of models, works or simple artistic studies;

### Prerequisites

Before the course unit the learner is expected to be able to:  
It has no prerequisites.

### Course contents

#### Course contents (extended version)

1. Historical Approach: Origins of geometry and perspective.
2. Projections:
  - Conical or cylindrical; Orthogonal.
  - Classification of perspectives and basic notions of perspective.
3. Linear Perspective:
  - Definitions and theorems.
  - Perspective of the point and the line.
  - Perspective of geometric figures.
  - The three cases of perspective.
  - Perspective of geometric solids .
4. Shadows:
  - Shadow of the point and the line.
  - The four cases of light.
  - Shadow of geometric figures.
5. Reflections:
  - Reflex point, straight line, geometric figures and solids .

### Recommended reading

1. CANOTILHO, Luís Manuel Leitão (2005). *Perspectiva Pictórica*. Séries Estudos, n.º 75. Instituto Politécnico de Bragança.
2. BENIOT, Emile (2012). *The Artistic Perspective*. Eudaimon Press.
3. AGERER, Markus Sebastian (2017) *Drawing Perspective & Space: Basic Principles of Drawing in Perspective B/W*. Amazon. Distribution GmbH. ISBN: 1540361632.
4. MONTAGUE, John (2017). *Basic Perspective Drawing: A Visual Approach*. 6th Edition. Smith Edition. ISBN: 978-1118134146.
5. METZGER, Fhil (2007). *The Art of Perspective: The Ultimate Guide for Artists in Every Medium*. North Light Books (May 29, 2007). ASIN: B0056J62HA.

### Teaching and learning methods

This program has as its main priority in students develop logical and deductive abilities relating to perception, interpretation and representation of shapes and objects in space, arming them with an ability to understand the message and highlighting artistic ideas.

### Assessment methods

1. CONTINUOUS EVALUATION - (Regular, Student Worker) (Final)
  - Intermediate Written Test - 70%
  - Development Topics - 30%
2. EVALUATION OF EXAMINATION - (Regular, Student Worker) (Supplementary, Special)
  - Development Topics - 60% (4 art. 7 - Frequency and Evaluation Regulations - Classification obtained in Continuous Assessment.)
  - Final Written Exam - 40%

### Language of instruction

Portuguese, with additional English support for foreign students.

### Electronic validation

Luís Manuel Leitão Canotilho	Jacinta Helena Alves Lourenço Casimiro da Costa	António José Santos Meireles	Carlos Manuel Costa Teixeira
25-01-2024	19-02-2024	21-02-2024	25-02-2024