



## **ACADEMIC PROGRAM**

### **DESIGN AND DEVELOPMENT OF ENVIRONMENTS AND ELEMENTS**

### **B.F.A. IN ANIMATION**

***MODALITY: ON CAMPUS***

***ACADEMIC YEAR: 2023-2024***

|                            |  |
|----------------------------|--|
| <b>Name of the course:</b> | <b>Design and Development of Environments and Elements</b> |
| Degree :                   | Animation  |
| Location:                  | Centro Universitario de Tecnología y Arte Digital          |
| Area:                      | Artistic Fundamentals                                      |
| Year:                      | 3º   |
| Teaching period:           | 2  |
| Type:                      | OB   |
| ECTS credits:              | 6  |
| Teaching modality:         | On campus  |
| Language:                  | English  |
| Lecturer / Email           | Pablo Soto León / pablo.soto@u-tad.com                     |
| Web page:                  | <a href="http://www.u-tad.com/">http://www.u-tad.com/</a>  |

## SUBJECT DESCRIPTION

### Area description

The subject Artistic Foundations provides the students with the necessary fundamentals for a digital graphics creator: identification and historical context of artistic currents, knowledge of color, light and photography, three-dimensional representation of space and learning of the basis and classical principles of animation and visual development. Knowledge and learning of traditional principles and techniques is one of the essential basis for training professionals to be able to adapt and take advantage of the progress of digital animation technology.

### Subject description

The subject of "Design and Development of Environments and Elements" is fundamental for the correct understanding of the integration of structures and environments in animation projects. In very rare occasions the action of the characters lacks a design of the environment in which the actions take place. Likewise, this subject is closely related to character design, since the interrelation between the characters and the physical, landscape and architectural spaces in which they develop and interact is fundamental in the artistic and narrative development. The subject is essential for an animator to understand the volumetric, spatial and environmental interrelationships that surround the main characters of any animated narrative.

## COMPETENCIES AND LEARNING OUTCOMES

## Competencies

### BASIC AND GENERAL

CG1 - Critically understand the interrelationships between the different arts and their currents of thought throughout history and the evolution of aesthetic, historical and cultural values.

CG2 - Know the vocabulary and concepts inherent to the digital art field.

CG4 - Apply the aesthetic and perception fundamentals of the image in terms of structure, form, color and space in the representation of digital content.

CG9 - Use the techniques and artistic tools associated with the generation of digital content.

CB1 - That students have demonstrated to possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.

CB2 - That students know how to apply their knowledge to their work or vocation in a professional manner and possess the competencies usually demonstrated through the development and defense of arguments and problem solving within their field of study.

CB3 - That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.

CB4 - Students should be able to convey information, ideas, problems and solutions to both specialized and non-specialized audiences.

CB5 - That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

### TRANSVERSALS

CT5 - Demonstrate versatility, flexibility and creativity in the development of projects, activities and work.

### SPECIFIC

CE18 - Devise, design and capture, through drawing, the design and construction of environments, landscapes and scenarios for their construction in 3D.

CE5 - Apply the traditional principles of animation to the digital animation of characters and other elements.

SC1 - Perform drawing with traditional and digital techniques of artistic creation for both ideation and representation of images.

SC2 - Know and apply the basics of photography, its elements of visual composition and the expressive value of lighting.

CE4 - Represent three-dimensional forms and spaces using the essential techniques of traditional and digital modeling. digital modeling techniques.

SC6 - Use the principles and techniques of artistic creation for the conceptualization, design and development of characters, environments, vehicles and props.

CE8 - Apply technical drawing to the representation of parts or spaces.

## Learning outcomes

At the end of the degree, the graduate will be able to:

- Analyze artistic works taking into account aesthetic principles and cultural context.
- Interpret the visual and compositional language of a digital artwork.
- Use basic traditional drawing techniques such as charcoal, graphite or watercolor to represent images.
- Apply the physical and aesthetic principles of color in artistic and narrative creation.
- Handle with fluency digital tools for the creation of images, videos, modeling and artistic works.
- Use artistic expression techniques such as drawing, 3D modeling and postproduction for the generation of digital content.
- Develop strategies for continuous and autonomous training in new techniques and tools of the profession of an animator.
- Adapt the knowledge of traditional drawing techniques to digital environments.
- Draw with exclusively digital means and tools for the representation of images applied to the animation industry.
- Use the visual language applied to the different animation techniques to transmit ideas.
- Represent the physical environment, natural figures and objects through drawing with traditional or digital techniques.
- Apply the laws of representation systems for the visualization of objects, figures and spaces.
- Understand and use the photographic language for the creation of artistic and narrative images.
- Use light as a narrative and dramatic element in the creation of photographic images with knowledge of its physical principles.
- Operate a photographic camera according to its principles of operation for the creation of artistic images.
- Design characters through the visual expression of their psychological characteristics.
- Design environments, locations and atmospheres through the visual expression of their characteristics.
- Represent on a two-dimensional plane a three-dimensional space or object according to the systems of representation.
- Discriminate the volumetric, chromatic, space and environment interrelations that occur between the characters and physical spaces used in an animation scene.
- Apply ideation and creativity techniques to artistic production such as flow state or lateral thinking.

## CONTENTS

- Introduction: cinema and architecture.
- Proportion and anthropometry in architecture.

- Atmosphere and lighting
- Architectural and structural elements
- Decorative and environmental elements
- Simulation of the natural environment
- Environments development: concept and production art
- Virtual landscape and environment development tools

## SUBJECT SYLLABUS

Topic 1: Introduction

1.1 scenography

1.2 the art department

Theme 2: Formal ElementsBasic Concepts

2.1 Composition I

2.2 composition II

2.3 perspective

2.4 lighting I

2.5 color.

2.6 scale

2.7 materials and textures

2.8 design

2.9 differences in the design of environments between different formats

Theme 3: Design

3.1 urban and industrial decorative typologies

3.2 natural typologies

3.3 thematic typologies

Theme 4: Projects

## TRAINING ACTIVITIES AND TEACHING METHODOLOGIES

### TRAINING ACTIVITIES

| LEARNING ACTIVITIES | Total hours | Hours of presence |
|---------------------|-------------|-------------------|
|---------------------|-------------|-------------------|

|   |       |       |
|---|-------|-------|
| <i>Theoretical / Expository classes</i>                     | 31,25 | 31,25 |
| <i>Practical classes</i>                                    | 23,75 | 23,75 |
| <i>Tutorials</i>  | 4,50  | 2,25  |
| <i>Independent study and autonomous work of the student</i> | 47,50 | 0,00  |
| <i>Elaboration of work (group or individual)</i>            | 37,50 | 0,00  |
| <i>Evaluation Activities</i>                                | 5,50  | 6,00  |
| <b>TOTAL</b>  | 150   | 63,25 |

### Teaching methodologies

Expository method or master class

Case method

Problem-based learning

Cooperative or collaborative learning

Inquiry-based learning

Flipped classroom or inverted classroom methodology

Gamification

### TEMPORAL DEVELOPMENT

Theme 1-2 weeks

Theme 2- 2 weeks

Theme 3- 2 weeks

Theme 4- 2 weeks

Topic 5 - 3 weeks

Topic 6 - 3 weeks

### EVALUATION SYSTEM

| ASSESSMENT SYSTEM  | MINIMUM SCORE<br>RESPECT TO THE<br>FINAL ASSESSMENT<br>(%) | MAXIMUM<br>SCORE RESPECT<br>TO THE FINAL<br>ASSESSMENT (%) |
|--|--|--|
| <i>Assessment of participation in class, exercises or projects of the course</i> | 10   | 20   |
| <i>Assessment of assignments, projects, reports, memos</i>                       | 20   | 60   |
| <i>Objective test</i>  | 30   | 70   |

## GRADING CRITERIA

| ASSESSMENT SYSTEM  | ORDINARY<br>EVALUATION | EXTRAORDINARY<br>EVALUATION |
|--|------------------------|-----------------------------|
| <i>Assessment of participation in class, exercises or projects of the course</i> | 10                     | 10                          |
| <i>Assessment of assignments, projects, reports, memos</i>                       | 50                     | 50                          |
| <i>Objective test</i>  | 40                     | 40                          |

### General comments on the evaluations/assessments

Students must understand the importance of communication and demonstrate it through the use of visual language in order to pass the course satisfactorily.

Work will not be accepted out of form and date without a justified cause.

The final numerical grade is from 0 to 10, being an indispensable requirement to achieve a minimum grade of 5 points in order to obtain a pass.

The extraordinary call will require a work that will represent 100% of the grade of the course.

Any detection of plagiarism in a work or exam will imply the failure of that work with a zero, the report to the faculty and academic coordinator and the application of the current regulations, which can lead to very serious penalties for the student. It is crucial to make deliveries within the deadline. A 10 minute courtesy period will be given during which the submission will be considered on time. After that time, work may be handed in within 24 hours after the deadline, but with a penalty on the grade determined by the teacher. No work will be accepted after 24 hours.

## LIST OF REFERENCES (BOOKS, PUBLICATIONS, WEBSITES):

Basic:

ALBRECHT, Donald & NEUMANN, Dietrich (1996): Film Architecture: From Metropolis to Blade Runner. Prestel-Verlag.

ETTEDGUI, Peter (2001): Diseño de Producción y Dirección Artística. Océano Grupo Editorial.

MATEU-MESTRE, Marcos (2010): Framed Ink: Drawing and Composition for Visual Storytellers. Design Studio Press

## **REQUIRED MATERIALS, SOFTWARE AND TOOLS**

### **Type of classroom**

Cintiq

### **Materials:**

Display - Digital whiteboard, Laptop

### **Software:**

Photoshop, Autodesk Maya.