



# **ACADEMIC PROGRAM**

## **PRINCIPLES OF ANIMATION**

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

***MODALITY: ON CAMPUS***

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

<b>Name of the course:</b>	<b>Principles of Animation</b>
Degree :	Animation
Location:	Centro Universitario de Tecnología y Arte Digital
Area:	Artistic Fundamentals
Year:	1º
Teaching period:	2
Type:	B
ECTS credits:	6
Teaching modality:	On campus
Language:	English
Lecturer / Email	Pablo Alonso Lasagabaster/pablo.lasagabaster@u-tad.com
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## 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

In the "Principles of Animation" course, students will acquire the basic skills and abilities necessary to understand the principles and methods that allow the animator to create a fluid and correct animation. The course focuses on the different animation techniques such as stop motion, traditional animation and hybrid methods.

## 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 to animation as a technique and animation cinema.
- The animator's working methodology.
- The twelve basic principles of animation.
- Application of the principle of animation to complete animations.
- Introduction to digital animation techniques.

## SUBJECT SYLLABUS

Introduction to animation as a technique and animated film Origin and understanding of classical animation. Methodology and application to the digital medium.

2. The 12 principles of animation.

-Stretch and Shrink.

-2.2. Anticipation

-2.3. Staging

-2.4. Direct Animation and Pose-by-Pose Animation

-2.5. Complementary action and Overlapping action

-2.6. Accelerate and Decelerate

-2.7. Arcs

-2.8. Secondary Action

-2.9. Timing

-2.10. Exaggeration

-2.11. Solid drawing

-2.12. Appeal

Application of the twelve principles in forms, characters, cycles, effects and acting.

## 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. 4 weeks

Theme 2. 4 weeks

## EVALUATION SYSTEM

ASSESSMENT SYSTEM	MINIMUM SCORE RESPECT TO THE FINAL ASSESSMENT (%)	MAXIMUM SCORE RESPECT TO THE FINAL 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 EVALUATION	EXTRAORDINARY EVALUATION
<i>Assessment of participation in class, exercises or projects of the course</i>	10	10
<i>Assessment of assignments, projects, reports, memos</i>	60	60

<i>Objective test</i>	30	30
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### General comments on the evaluations/assessments

Subject 0 will be considered non-assessable, except for the aspects referring to attendance and attitudes.

The subject will be divided into three blocks, which correspond to those indicated in the above criteria:

- A block of activities carried out in class. These will be assessed weekly by the teacher, once the exercise has been completed. Students will hand in their drawings to the teacher, who will evaluate them and return them once they have been corrected. Students will take photographs of their work, which must be uploaded to Blackboard on time so that they can be recorded.

- A block of extension activities, research, etc., which the student will carry out outside class hours based on the proposals indicated. They will be handed in for correction on the day of the exam (they will be returned immediately) and will be uploaded in a single document to the Blackboard platform. They must be done in an Anatomy Notebook in A3 format.

- The objective test or final exam. A drawing test of a human model will be carried out in the classroom, during two hours and on the date duly designated in the examination period established by the UTA. It will be photographed and uploaded to Blackboard. The original will be kept at the secretary's office as documentary evidence.

- Attendance, handing in and care of the material (10% of the total mark). Work handed in after the deadline will be penalised by -20% compared to the rest. In order to pass the course, a minimum of 80% of the assigned work must be handed in.

- Class attendance is compulsory. Students who do not attend at least 80% of the class hours will fail the course.

In order to pass the course, a minimum passing grade (5) must be obtained in each of the blocks, so that the percentages indicated are then applied to obtain the final grade. Otherwise, the course will be SUSPENSE and the student will have to present, in the extraordinary call, those works of the block that would have been failed, keeping the grades passed to obtain the final grade of that call.

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

Basic:

Moreaux, A. (1988). Anatomía Artística del hombre. Barcelona: Ediciones Norma.

Simblet, S. (2002). Anatomy for the artist. Barcelona: Blume.

F. Thomas. (1995). The Illusion of life. Disney Edition Deluxe

Williams, Richard E. (2009) The Animator's Survival Kit Faber & Faber

Blair, Preston (1999). Dibujos Animados. Ed. Evergreen

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

### **Type of classroom**

Theory

### **Materials:**

Display - Digital whiteboard, Laptop

### **Software:**

Toon Boom Harmony