



# **ACADEMIC PROGRAM**

## **PROJECTS IV**

### **B.F.A. IN INTERACTIVE PRODUCT DESIGN**

***MODALITY: ON CAMPUS***

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

<b>Name of the course:</b>	<b>Projects IV</b>
Degree :	Interactive Product Design
Location:	Centro Universitario de Tecnología y Arte Digital
Modulo:	Projects
Area:	Projects
Year:	2º
Teaching period:	2º
Type:	OB
ECTS credits:	3
Teaching modality:	On campus
Language:	English
Lecturer / Email	David Aragonés Mallén/ david.aragones@u-tad.com
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## **SUBJECT DESCRIPTION**

### **Area description**

This subject belongs to the Projects module and, within this, to the Projects area.

The area "Projects" enables students to consolidate and reinforce the knowledge and skills acquired in the other subjects, develop teamwork skills and acquire professional work dynamics. It also integrates an interdisciplinary approach, which is considered absolutely necessary to complete their professional profile.

### **Subject description**

This subject has links with the other subjects of the degree, and more specifically with those taught in the second four-month period of the second year, since one of the objectives of this degree is the development of interactive projects with special attention to video games. Knowing the principles of design and implementation of interfaces and modes in a game is another of the bases on which project development is based.

The subject "Projects" enables students to consolidate and reinforce the knowledge and skills acquired in the rest of the subjects, develop teamwork skills and acquire professional work dynamics. It also integrates an interdisciplinary approach which is considered absolutely necessary to complete their professional profile.

Specifically, Projects IV allows the student to begin to understand and integrate interface designs, HUDs and modes in a video game or interactive application.

## **COMPETENCIES AND LEARNING OUTCOMES**

### **Competencies**

#### **BASIC AND GENERAL**

GC1 - Lifelong learning through self-study and continuous training.

GC2 - Knowing how to adapt to change and new situations with flexibility and versatility.

GC4 - Exercise leadership and negotiation skills.

GC5 - Demonstrate initiative and entrepreneurial spirit.

GC6 - Demonstrate motivation for quality.

GC7 - Show interest and sensitivity in environmental and social issues, as well as the ability to analyse the social dimension of the activity and corporate social responsibility.

GC8 - Demonstrate the ability to work in a team.

GC9 - Be able to manage time effectively.

GC10 - Have the ability to work in an international context, as well as in diverse and multicultural environments.

GC11 - Manage basic skills for interpersonal relations.

GC12 - Express a critical and self-critical sense and the ability to analyse in order to evaluate different alternatives.

GC13 - Value the ethical sense of work.

GC14 - Know how to work in a team in multidisciplinary environments.

GC15 - Organisational and planning skills

GC16 - Express oneself correctly in oral and written form.

GC17 - Demonstrate the ability to analyse, synthesise and gather information from different sources.

GC18 - Manage information appropriately.

GC19 - Know how to make decisions and solve problems in the professional field.

CB1 - That students have demonstrated possession and understanding of knowledge in an area of study that builds on the foundation of general secondary education, and is usually at a level that, while relying on advanced textbooks, also includes some aspects that involve knowledge from the cutting edge of their field of study.

CB2 - Students are able to apply their knowledge to their work or vocation in a professional manner and possess the competences usually demonstrated through the development and defence of arguments and problem solving within their field of study.

CB3 - Students have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgements that include reflection on relevant social, scientific or ethical issues.

CB4 - Students are able to communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

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

#### TRANSVERSALS

CT1 - To deploy their knowledge, activities and values in cultural, sporting and social spheres.

CT2 - Show interest in acts of cooperation and civic solidarity.

#### SPECIFIC

SC4 - Analyze the needs and moral and ethical implications associated with the development and design that arise for the creators of interactive products.

SC7 - Knowing the practical fundamentals of the use and programming of computers and interactive product development tools.

SC8 - Evaluate the ethical, technical and creative implications of technology in the design of interactive products.

SC11 - Apply creativity in the digital content environment.

SC18 - Apply theoretical and practical knowledge of product design for content development.

SC22 - Understand and communicate clearly and effectively the guidelines for the development of a project.

SC23 - Understand the relevant aspects of the digital society in the context of sociology, philosophy, psychology, ethics, moral values and knowledge-related aspects that affect the creation, publication and distribution of a project.

#### Learning outcomes

Identify needs and situations that require the intervention of the professional

Develop cooperation skills with other professionals

To become aware of the ethical component and deontological principles of the exercise of the profession

To be aware of the fundamental rights and equality between men and women in the field of work.

Appropriately use theories, procedures and tools in their professional development

#### CONTENTS

- Gender Election
- Analysis and design of mechanics appropriate to the chosen genre
- High level flow design and game modes / menus
- Definition of a unified artistic style

- Implementation of multiple mechanics
- Implementation of menus and game interfaces for the different game modes
- Creation of graphic content appropriate to the visual style chosen.

## SUBJECT SYLLABUS

Topic 1: Characters and animations.

Topic 2: Terrain, skybox and basic lighting.

Topic 3: 3D models and materials.

Topic 4: Camera and basic UI.

Topic 5: Advanced UI and autolayout: Advanced UI and autolayout.

Topic 6: Advanced lighting.

Topic7: Post-processing effects.

## TRAINING ACTIVITIES AND TEACHING METHODOLOGIES

### TRAINING ACTIVITIES

LEARNING ACTIVITIES	Total hours	Hours of presence
<i>Theoretical classes</i>	3,00	3,00
<i>Seminars and workshops</i>	3,00	3,00
<i>Practical classes</i>	3,00	3,00
<i>Tutorials</i>	3,00	3,00
<i>Evaluation Activities</i>	3,00	3,00
<i>Group work and study</i>	30,00	18,00
<i>Autonomous and individual study and work</i>	30,00	0,00
<b>TOTAL</b>	<b>75</b>	<b>33</b>

### Teaching methodologies

Expository method/Master lecture

Case studies

Exercise and problem solving

Problem-based learning

Project-oriented learning

Cooperative learning

## TEMPORAL DEVELOPMENT

Topic 1: Characters and animations: 3 semanas

Topic 2: Terrain, skybox and basic lighting: 2 semanas

Topic 3: 3D models and materials: 2 semanas

Topic 4: Camera and basic UI: 2 semanas

Topic 5: Advanced UI and autolayout: 3 semanas

Topic 6: Advanced lighting: 3 semanas

Topic 7: Post-processing effects.: 3 semanas

## 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>	20	40
<i>Assessment of assignments, projects, reports, memos</i>	60	80
<i>Objective test</i>	0	0

## GRADING CRITERIA

ASSESSMENT SYSTEM	ORDINARY EVALUATION	EXTRAORDINARY EVALUATION
<i>Assessment of participation in class, exercises or projects of the course</i>	40	40

<i>Assessment of assignments, projects, reports, memos</i>	60	60
<i>Objective test</i>	0	0

### General comments on the evaluations/assessments

- - Failure in continuous assessment if:
  - o 2 or more of the 5 follow-up deliveries are not made.
  - o The intermediate or final delivery of the project is not carried out on time and in the correct manner.
- - On losing continuous assessment:
  - o Documents and project must be handed in at the extraordinary call.
- - Automatic failure if:
  - o Plagiarism is detected in the projects, including code, game design, levels, etc.
  - o Plagiarism detectors will be used in suspicious projects.
  - o Do not copy projects from other students, make your own from scratch.
  - o Miss 20% or more of classes.
  - o Failures go directly to the extraordinary exam.
  - o Any detection of plagiarism, copying or use of bad practices (such as the use of AIs) in a paper or exam will result in a fail grade of zero for that paper, a report to the faculty and academic coordinator and the application of the current regulations, which can lead to very serious penalties for the student.
- The use of SmartWatches or mobile phones is not permitted during exams. These devices must be put away and out of sight of the student during the exam.
- The use of mobile phones is not permitted during lessons.
- Late submissions will be penalised as follows:
  - o - Less than 1 hour: -1 point
  - o - Between 1-2 hours: -2 points
  - o - Between 2-3 hours: -3 points
  - o - So on and so forth up to 0

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

#### Key references

ROGERS, Scott. Level Up!: The Guide to Great Video Game Design. John Wiley & Sons 2010

D. SAUNDERS, Kevin y Novak, Saunders, Game Development Essentials: GameInterfaceDesign. Delmar Cengage Learning. 2013

KENT, Steven L. (2001). The Ultimate History of Video Games. Random House.

#### Recommended references

DONOVAN, Tristan (2010). Replay: The History of Video Games. YellowAnt Media.

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

#### **Type of classroom**

Projection equipment and whiteboard

#### **Materials:**

Laptop computer

#### **Software:**

Entorno de desarrollo de juegos / Game development environment

Adobe CC.