

# ACADEMIC PROGRAM

# INTRODUCTION TO GAME DESIGN B.F.A. IN INTERACTIVE PRODUCT DESIGN

**MODALITY: ON CAMPUS** 

ACADEMIC YEAR: 2023-2024



Name of the course:	Introduction to Game Design
Degree :	Interactive Product Design
Location:	Centro Universitario de Tecnología y Arte Digital
Modulo:	Ideation and Concept Design
Area:	Design of interactive products
Year:	1º
Teaching period:	1º
Туре:	ОВ
ECTS credits:	6
Teaching modality:	On campus
Language:	English
Lecturer / Email	Jaime Fernando Barahona Martínez/jaime.barahona@u-tad.com
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# SUBJECT DESCRIPTION

#### Area description

This subject belongs to the module of Conceptual Design and Ideation and, within this, to the area of Design of Interactive Products. This area allows students to acquire knowledge of audiovisual narrative, game and player psychology, visual and artistic design and, above all, the design of the mechanics and dynamics that define the playability of the interactive product.

#### **Subject description**

Introduction to Video Game Design is a subject that aims to lay the theoretical foundations necessary to face the rest of the subjects of the Degree in Interactive Product Design with the solid foundations necessary for their understanding.

In Introduction to Game Design, students will be introduced to the different areas and skills related to game design, learning not only about the different facets of a game designer, but also how the other disciplines involved in the creation of video games work.

Students will learn to develop their ideas, translating them into design documents and through knowledge of the main elements of the video game.



Since students take this subject without a previous background, they must acquire throughout the course the fundamentals and vocabulary involved in the profession, as well as learning to analyse the video game with a critical eye that goes beyond the analysis carried out by an ordinary gamer or the specialised press.

# **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.

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.

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

CG14 - Know how to work in a team in multidisciplinary environments.

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

GC18 - Manage information appropriately.

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.

SPECIFIC

SC1 - Know the language necessary to communicate and structure a coherent discourse in the field of sociology, philosophy and psychology in relation to the design of interactive products.



SC3 - Analyse the social and cultural aspects that favour the usability of interactive products.

SC5 - Understand the influence of sociology, philosophy and psychology in their correlation with the history of art, literature and games as a reference in the creative process.

SC6 - Apply the practical fundamentals of mathematics and physics to the creation of an interactive digital product.

SC9 - Understand the principles of audiovisual narrative to develop discourses and stories applicable to interactive products.

SC11 - Apply creativity in the digital content environment.

SC12 - Knowing the elements involved in the design of an interactive work in relation to the user.

SC13 - Applying basic knowledge of human-machine interaction to an interactive digital product.

SC16 - Understand the processes of the elements involved in interactive artistic production.

SC17 - Apply the fundamentals of animation on computer-generated models.

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

SC19 Understand the design principles that enable the use, accessibility and usability of interactive products and their philosophical implications.

#### Learning outcomes

Understand interactive application design as a global process

Build stories that can visually capture the literary elements they are based on

Categorize the different types of video games according to their design elements

Manage 2D design concepts in the development of a game

Apply game design knowledge to building a basic 3D game

Apply Methodology and Standards in Game Design

Design an entire character according to its physical, behavioral, and communication aspects.

Use character design principles and dialogues in creating consistent visual stories and dialogues

### CONTENTS

- Analysis of interactive experiences
- Development of theoretical prototypes for interactive experiences
- Interaction with theoretical-practical contents.
- Fundamentals of contextualization of information
- Infographics and environments
- Development of roles in the interactive video game industry





- Idea development processes
- Conceptualization of the game design document (GDD)

# SUBJECT SYLLABUS

- 1. Introduction to the videogame industry
  - 1.1. The role of the designer and development team
  - 1.2. The industry outside the development team
  - 1.3. Phases of videogame development
  - 1.4. Genres, models and references
  - 1.5. Publication
- 2. Ideas
  - 2.1. Where ideas come from
  - 2.2. How an idea is developed
- 3. The elements of the video game
  - 3.1. Setting
  - 3.2. Story
  - 3.3. Characters
  - 3.4. Control
  - 3.5. Camera
  - 3.6. Challenges and objectives
  - 3.7. Interface
  - 3.8. Resources
  - 3.9. MDA model
  - 3.10. Emergent gameplay
- 4. Introduction to level design
  - 4.1. The level designer
  - 4.2. Level design over time
  - 4.3. Flow Theory and Interest Curves
  - 4.4. Layout of levels





- 4.5. Accessibility
- 5. Platform genre
  - 5.1. Mechanics
  - 5.2. Challenges and Objectives
  - 5.3. Subgenres
- 6. Design documents
  - 6.1. Designer's tools
  - 6.2. Document types
    - 6.2.1. Concept document
    - 6.2.2. Pitch document
    - 6.2.3. Extended/high level concept document
    - 6.2.4. Design document (GDD)
    - 6.2.5. How documents are produced

## TRAINING ACTIVITIES AND TEACHING METHODOLOGIES

#### **TRAINING ACTIVITIES**

LEARNING ACTIVITIES	Total hours	Hours of presence
Theoretical classes	50,00	50,00
Seminars and workshops	0,00	0,00
Practical classes	20,00	20,00
Tutorials	3,43	3,43
Evaluation Activities	6,29	6,29
Group work and study	10,29	0,51
Autonomous and individual study and work	60,00	0,00
TOTAL	150	80

**Teaching methodologies** 





Expository method/Master lecture

Case studies

Exercise and problem solving

Problem-based learning

# **TEMPORAL DEVELOPMENT**

Lesson 1. Introduction to the videogame industry: 3 weeks

- Lesson 2. Ideas: 2 weeks
- Lesson 3. The elements of the video game: 4 weeks
- Lesson 4. Introduction to level design: 2 weeks
- Lesson 5. Platform genre: 2 weeks
- Lesson 6. Design documents: 2 weeks

# **EVALUATION SYSTEM**

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

# **GRADING CRITERIA**

ASSESSMENT SYSTEM	ORDINARY EVALUATION	EXTRAORDINARY EVALUATION
Assessment of participation in class, exercises or projects of the course	20	20
Assessment of assignments, projects, reports, memos	30	30





50

Objective test	50	
Objective test	50	-

#### General comments on the evaluations/assessments

• Class participation will account for 20% of the final grade of the course, this grade will be kept for the extraordinary call in case of failure of the course. Attendance must be at least 80% to be eligible for the ordinary call.

• The evaluation percentages of the ordinary call will be maintained in the extraordinary call.

• It is necessary to present each and every one of the activities, on time or during the period of late acceptance, and obtain a grade of 5 or higher in the work block as a whole in order to obtain an average and pass the course. The late acceptance period will be three days, with its initial 10 minutes of courtesy in which it will be considered sent on time, and if it is delivered during the rest of the period there will be a penalty of one to three points of the grade. The approved works will be kept for the extraordinary call.

• It is necessary to obtain a grade of 5 or higher in each of the parts of the objective assessment, control and final activity, in order to pass the course. In order to be eligible for evaluation in the ordinary call, it is necessary to have 80% attendance.

• A file that cannot be opened or whose link is broken will have a grade of 0. Subsequent submissions (beyond the three-day margin from the deadline) or "attempts to prove that it was there, but disappeared" will not be accepted, so the student is advised to check the status of the file after uploading it to his or her support page.

• It is important to take care of the orthography and presentation of the assignments, a great number of mistakes or in case of serious faults will suppose a subtraction of points according to the magnitude of these.

• Any detection of plagiarism, copying or use of malpractice (such as the use of Als) in a paper or exam will result in the failure of that paper with a zero, 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 any type of phones is not allowed during the exams. Such devices will have to be put away and out of the student's sight during the exam.

• The use of smartphones or any type of phone is not allowed during classes.

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

#### Key references

Fullerton, T. (2014). Game Design Workshop: A Playcentric Approach to Creating Innovative Games. ISBN: 978-0240809748.





Rogers, S. (2010). Level Up! The Guide to Great Video Game Design. ISBN: 978-0470688670.

Rouse, R. (2001). Game Design Theory & Practice. ISBN: 978-1556229121.

Recommended references

Adams, E. (2006). Fundamentals of Game Design. ISBN: 978-0321643377.

Dille, F. y Platten, J. Z. (2007). The Ultimate Guide to Video Game Writing and Design. ISBN: 978-1580650663.

Koster, R. (2004). A Theory of Fun for Game Design. ISBN: 978-1449363215.

Salen, K. y Zimmerman, E. (2004). Rules of Play: Game Design Fundamentals. ISBN: 978-0262240451.

Schell, J. (2008). The Art of Game Design, A Deck of Lenses. ISBN: 978-0615218281. Swink, S. (2008). Game Feel: A Game Designer's Guide to Virtual Sensation. ISBN: 978-0123743282.

# **REQUIRED MATERIALS, SOFTWARE AND TOOLS**

#### **Type of classroom**

Projection equipment and whiteboard

#### Materials:

Laptop computer

#### Software: