ACADEMIC PROGRAM

GAME DESIGN (III)

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

MODALITY: ON CAMPUS

ACADEMIC YEAR: 2023-2024

Name of the course:	Game Design (III)	
Degree :	Interactive Product Design	
Location:	Centro Universitario de Tecnología y Arte Digital	
Modulo:	Ideation and Concept Design	
Area:	Human-machine interaction	
Year:	3º	
Teaching period:	2º	
Type:	OB	
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 Human-Machine Interaction.

This area refers to the study and practice of the set of techniques necessary for the creation of all those applications in which an interrelation between a machine, device, application and the human being is necessary.

Subject description

The course Video Game Design III aims for students to acquire a series of skills in how game mechanics are developed in video games.

Through in-depth analysis of the mechanics present in the different video game genres and various practical applications, the student will acquire the knowledge and tools necessary to design game mechanics according to the final objectives of the work. It is complemented with Video Game Design II.

This subject provides students with knowledge about one of the structural components of the design of any video game. Understanding the functioning and implications of game mechanics is fundamental for the video game designer, who will have to work with them on a daily basis.

The knowledge acquired in this subject will be applicable in advanced video game design subjects.

COMPETENCIES AND LEARNING OUTCOMES

Competencies
BASIC AND GENERAL

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.

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

GC18 - Manage information appropriately.

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

GC6 - Demonstrate motivation for quality.

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.

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.

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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.

SC14 - Apply the fundamentals of narrative to the development of interactive products.

SC15 - Analysing the characteristics and needs of users in the humanistic environment as a fundamental element in the design of interactive products.

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

Learning outcomes
Incorporate the psychological fundamentals into the game design.

Build a system in which players' actions make sense in the context of the game

Define a game rule structure to produce a satisfying game experience

Recognize the special needs of players with disabilities

Evaluate the usability components in a game

Designing a testing system for a game

CONTENTS
• Definition and development of game mechanics

• Challenges and collective behaviour

• Game goals: definition and types

• Developments of progressive difficulty in the design

• Reinforcements and punishments

• Genres and mechanics

• Mechanical Hybridization

• Moral Implications in the Design of Video Games and Interactive Products

• Construction of videogames through mechanics

• Mechanical design process

SUBJECT SYLLABUS

1. Design Extension

1.1. Specialities

1.2. Design SMART

1.3. Flowgraphs in Design

2. Character Centred Design

2.1. The Character from Videogame Design

2.2. Character Creation Process

2.3. Relevant Examples

3. Accessibility

3.1. The Concept of Accessibility

3.2. The Application of Accessibility

3.3. Accessible Practices in Videogames

4. Genres

4.1. RPG

4.2. Stealth and Horror

4.3. Shooter

4.4. Strategy

TRAINING ACTIVITIES AND TEACHING METHODOLOGIES

TRAINING ACTIVITIES

LEARNING ACTIVITIES	Total hours	Hours of presence
Theoretical classes	44,44	44,44
Seminars and workshops	0,00	0,00
Practical classes	35,56	35,56
Tutorials	4,22	4,22
Evaluation Activities	8,89	8,89
Group work and study	23,56	1,18
Autonomous and individual study and work	33,33	0,00
TOTAL	150	94

Teaching methodologies

Expository method/Master lecture

Case studies

Exercise and problem solving

Problem-based learning

TEMPORAL DEVELOPMENT

Topic 1 Design Extension: 3 weeks

Topic 2 Character Centred Design: 3 weeks

Topic 3 Accessibility: 4 weeks

Topic 4 Genres: 5 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	35	70
Objective test	30	60

GRADING CRITERIA

ASSESSMENT SYSTEM	ORDINARY EVALUATION	EXTRAORDINARY EVALUATION
Assessment of participation in class, exercises or projects of the course	10	10
Assessment of assignments, projects, reports, memos	50	50

Objective test	40	40

General comments on the evaluations/assessments

• Class participation: the evaluation of participation in class activities will be assessed on the basis of attendance and effort shown in the dynamics or interventions of the class. Attendance must be at least 80% in order for the student to have the opportunity to attend the ordinary call.

• Homework: This part consists of two main assignments and a set of minor deliveries related to practical and specific aspects of the subject. It is necessary to have at least a grade of 5 or higher in the main assignments and also in this part in order to obtain an average in the ordinary call. The approved works will be kept for the extraordinary call in case of not passing this part and, therefore, the subject in the ordinary call.

• Final project: This will consist of a complex final project, a document and a presentation, which will allow the knowledge acquired by the students throughout the course to be assessed. The knowledge acquired on game design and its process will be assessed, as well as on character design and their accessibility, and the implementation of the main characteristics of the genres studied. The student needs a minimum of 5 in this part to pass the subject and be assessed. The marks passed in this section, in case of failing the subject, will be kept for the extraordinary call.

• "Any detection of plagiarism, copying or use of malpractice (such as the use of AIs) 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 mobile phones is not permitted during the exams. These devices must be put away and out of sight during the exam.

• The use of mobile phones is not permitted during lessons.

Late submissions will be penalised as follows:

- Less than 1 hour: -1 point

- Between 1-2 hours: -2 points

- 2-3 hours: -3 points

- So on and so forth up to 0

LIST OF REFERENCES (BOOKS, PUBLICATIONS, WEBSITES):

Key references

SELLERS, M. (2018). Advanced Game Design. 1ª ed. Pearson Addison-Wesley. ISBN 978-0134667607

DAMS, E. y Dormans, J. (2012). Game Mechanics: Advanced Game Design. 1ª ed. New Riders. ISBN978-0321820273

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

Recommended references

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 Book of Lenses. ISBN: 978-0615218281

ADAMS, E. (2014). Fundamentals of Shooter Game Design. New Riders.

ADAMS, E. (2014). Fundamentals of Action and Arcade Game Design. New Riders.

ADAMS, E. (2014). Fundamentals of strategy game design. New Riders.

ADAMS, E. (2014). Fundamentals of Role-Playing Game Design. New Riders.

REQUIRED MATERIALS, SOFTWARE AND TOOLS

Type of classroom
Projection equipment and whiteboard

Materials:
Laptop computer

Software:
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