Course guide
804426 - EDDV - Digital Entertainment and Video Game Design

Last modified: 21/07/2025

Unit in charge: Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre.

Degree: BACHELOR'S DEGREE IN DESIGN, ANIMATION AND DIGITAL ART (Syllabus 2023). (Optional subject).
BACHELOR'S DEGREE IN DIGITAL DESIGN AND MULTIMEDIA TECHNOLOGIES (Syllabus 2023). (Optional subject).

Academic year: 2025 **ECTS Credits:** 6.0 **Languages:** Catalan

LECTURER

Coordinating lecturer: Mónica Martín

Others: Mónica Martín
Marta Fernández

PRIOR SKILLS

Creative and communicative abilities.
Use of office, audiovisual and interactive creation tools.

REQUIREMENTS

Games and videogames culture, interactive entertainment industry.

TEACHING METHODOLOGY

Class sessions are divided into two bands of activity:
1. Descriptive part, in which the teacher explains new content, describes work materials, and answers questions from students.
2. Participatory part, in which students work, explain and discuss the exercises.

LEARNING OBJECTIVES OF THE SUBJECT

- Idear mechanics and dynamics of games, as well as their uses for the elaboration of game design documents and proposals of friendly projects, which in turn are educational and / or persuasive, as well as coherent with human development and sustainability.

- Analyze the basic elements of a video game, including its objectives, design framework, mechanics, rewards, dynamics and aesthetics, and conceptualize new proposals based on the analytical and innovation part.

STUDY LOAD

Type	Hours	Percentage
Guided activities	12,0	8.00
Hours medium group	30,0	20.00
Self study	90,0	60.00
Hours large group	18,0	12.00

Total learning time: 150 h

CONTENTS

Introduction to Game Design

Description:
1. The Game Design discipline
2. The role of game designer
3. The creation process
4. Our strategy to create playful quality

Specific objectives:
Put into context the discipline, the office, and work processes and learning.

Related activities:
Research on the discipline, the process of creating and concepts related to quality.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Game elements and framework

Description:
1. Formal and abstract systems
2. Game elements
3. Frameworks
4. MDA framework

Specific objectives:
Recognize and analyze elements of play and meet and fall into designer frames.

Related activities:
Identification and classification of game elements.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Game Mechanics

Description:
1. Main mechanics
2. Rules
3. Particular mechanics
4. Connected mechanics
5. Mechanics and controls
6. Mechanics and player
7. Contingences
8. Sequence of events

Specific objectives:
Recognize, analyze, create and link game mechanics to create gameplay.

Related activities:
Analysis of different types of mechanics.
Creation and justification of mechanics.
Relationships between mechanics and other game elements.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Goals, rewards and modifiers

Description:
1. Goals
2. Rewards
3. Triangulation
4. Modifiers
5. Time
6. Randomness, probability and uncertainty

Specific objectives:
Recognize, analyze, create and relate starting pace.

Related activities:
Identification, analysis and classification of goals, rewards and modifiers.
Creating proposals and integration with playable contexts.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

The player

Description:
1. Different experiences for different people
2. Inherent to human condition
3. Consubstantial to culture
4. Learning and progression
5. Self-Determination Theory
6. Perception of welfare and happiness levels
7. Brain, emotion, behaviors
8. Survival, pleasure, pain
9. Mental models
10. Patterns
11. Bartle Test, User Types Hexad, Big Five Model

Specific objectives:
Knowing the characteristics of the players to optimize gaming systems.

Related activities:
Identifying motivator elements and their corresponding feedback with people.
Identifying and creating activity patterns. Relations with different personality traits.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Dynamics and game flow

Description:
1. Magic circle
2. Play as activity in time
3. Situations, decisions and actions
4. Fun
5. Game Flow
6. Game Loops
7. Curves of interest
8. Behaviors by conditioning
9. Motivation elements
10. Handling errors
11. Dynamics with objects
12. Puzzles

Specific objectives:
Recognize, analyze, create and dynamic linking.

Related activities:
Analysis and creation of situations, decisions and actions.
Analysis and creation of activity flow and fun.
Creating puzzles and integration with playable contexts.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Aesthetics and game-player communication

Description:
1. Perception and neuroscience
2. Conceptual communication
3. Ludology and narratology
4. Linearity and non-linearity
5. Conditioning by environment
6. Characters' roles

Specific objectives:
Recognize, analyze, create and relate aesthetic elements for optimum game-player communication.

Related activities:
Analysis of proposals and their integration with mechanics, concept and narrative.
Creating proposals, responding to criteria of content and gameplay.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

Strategy, documentation and communication

Description:
1. Creation and communication strategy
2. Traditional Game Design Document vs Wiki format

Specific objectives:
Recognize, analyze and create strategies creation and documentation.

Related activities:
Creating a strategy and design document GDD.

Full-or-part-time: 18h 45m
Practical classes: 7h 30m
Self study : 11h 15m

ACTIVITIES

SESSION EXERCISES

Description:
In this kind of exercises the studen makes analysis or creates being based on the teorical aspects that has learned, and also makes a document with his analysis or creation.

Specific objectives:
Analysis, investigation, and critical comprehension.

Material:
- Statement sheets.
- Explanations and resources given during the sessions.

Delivery:
- Document deliveries in e-campus.

Full-or-part-time: 12h
Practical classes: 12h

GAME JAMS

Description:
In this exercises the student creates depending on specific contingences.

Specific objectives:
Creation and documentation.

Material:
- Statement sheets.
- Explanations and resources given in the sessions.

Delivery:
- Documents in the e-campus.

Full-or-part-time: 4h
Practical classes: 4h

GAME DESIGN DOCUMENT

Description:
The student creates a Game Design Document with the formalization of a purposal.

Specific objectives:
Research, creativity and consistency of the purposals.

Material:
- Statement sheet.
- Explanations and resources given in the sessions.

Delivery:
- Documents by e-campus.

Full-or-part-time: 20h
Laboratory classes: 8h
Self study: 12h

GRADING SYSTEM

1. Exercises in each session. The sum of all will be a weighting of 20% of the grade for the course.
2. Practice, in "Jam" format. It will represent 25% of the grade for the course.
3. A final project. It will represent the 45% of the grade for the course.
4. The assessment of student participation in the training activities of matter, and learning attitude will be evaluated by monitoring their interventions. This assessment corresponds to 10% of the final grade.

Irregular actions that may lead to a significant variation of the grade of one or more students constitute a fraudulent performance of an evaluation act. This action entails the descriptive grade of failure and a numerical grade of 0 for the ordinary global evaluation of the course, without the right to re-evaluation.

If the lecturers have indications of the use of AI tools not allowed in the evaluation tests, they may summon the students concerned to an oral test or a meeting to verify the authorship.

EXAMINATION RULES.

- Part of the exercises can be done in class with the subject teacher. Students must also devote time to self-employment (after hours) to complete the exercises.
- The exercises, once completed, must be returned to the Virtual Campus in the corresponding delivery and date thereof, shall be taken into account in assessing those delivered before 24 hours of the deadline.
- The evaluation of the exercises involves not only the judgment of the case, also it means the defense made of the results and the realization of relevant documents.
- Any incidents that do not help solve the exercise in the indicated time must be previously communicated to the teacher. Following this communication and depending on the causes for failure to submit the exercise, if justified, alternatives were found to complete the assessment. Also they consider justified reasons for non-submission of the exercises communicated to management studies.
- The documents must be completed following the instructions, especially regarding file names. Proper management of the documentation is an aspect of desirable skills and part of the evaluation.

BIBLIOGRAPHY

Basic:

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- Huizinga, Johan . Homo Ludens. Alianza Editorial, 2012. ISBN ISBN 978-84-206-0853-2.
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Complementary:

- Pink, Daniel H.. Drive. Riverhead Books, 2009. ISBN 978-1-59448-884-9.
- Seligman, Martin E. P. . Flourish. Atria, 2011. ISBN 978-1-4391-9075-3.
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