



Course guide

804241 - DISVJ2 - Video Game Design II

Last modified: 08/09/2025

Unit in charge: Image Processing and Multimedia Technology Centre

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

Degree: BACHELOR'S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Compulsory subject).

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

LECTURER

Coordinating lecturer: Loepfe, Lasse

Others: Loepfe, Lasse
Grau, Tomás

PRIOR SKILLS

Teamwork and planning.

Creative and communicative abilities.

REQUIREMENTS

Games and videogames culture, videogames 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

- Define the concepts involved in the design of video games and gamified processes: video game design, gamification, human factor and user-centered design.
- Identify the elements of interactive narration in video games.
- Evaluate the direct and indirect consequences they have on safety, health, social justice and the gender perspective, products and services related to their professional field.
- Implement the mechanics, rules, structure and levels, the script and the artistic concept of a game or gamified process, following the criteria of gameplay and balancing to offer the best possible user experience.
- Design video games and playful processes aimed at both playful environments and areas that go beyond entertainment.
- Create worlds of fiction from which an IP can be constituted.
- Collaborate effectively and responsibly as a member or leader of a team, in interdisciplinary contexts or not, considering the available resources.



STUDY LOAD

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

Total learning time: 150 h

CONTENTS

Wordbuilding and economy

Description:

Worldbuilding Basics

- * Select the fantasy level
- * Economy, cartography and chronology
- * Creation methodologies

Inhabitants of the world

- * Races, cultures and beliefs
- * Cities, states and nations
- * Mysterious cults and secret societies

Science, magic and pantheons

Economy

- Classification of resources
- Resource flows. Generation, transformation and destruction
- Feedback loops
- Crafting and technology tree

Full-or-part-time: 30h

Theory classes: 10h

Practical classes: 8h

Guided activities: 2h

Self study : 10h



Simulation and core mechanics

Description:

Core mechanics

- Action and adventure games
- Simulation and management games
- Fusion of genres

simulation

- Balancing concepts and tools
- Randomness
- Sensitivity analyses
- Monte Carlo simulations
- Detection of dominant strategy

Full-or-part-time: 30h

Theory classes: 8h

Practical classes: 10h

Guided activities: 2h

Self study : 10h

Conflict

Description:

archetypes

* Archetypal races

* Archetypal classes

* Archetypal roles

* Characteristics, attributes and skills

The figure of the antagonistic force

* Enemies and monsters

Character progression

Combat systems

Playtesting

Cost curve

Full-or-part-time: 30h

Theory classes: 8h

Practical classes: 10h

Guided activities: 2h

Self study : 10h

ACTIVITIES

Game Jams

Description:

Activity based on interdisciplinary game jams, where the goal is to create, in teams and within a limited timeframe, prototypes of video games or interactive experiences that stem from the fusion of diverse themes such as art, worldbuilding, sustainability, technology, or game mechanics, among others. The activity encourages creativity, collaboration, and experimentation, providing a space to explore how different disciplines can connect through game design.

Full-or-part-time: 10h

Practical classes: 10h



Exercises

Description:

Activity focused on practicing game design exercises, aimed at developing specific skills such as mechanic design, game balancing, and interactive storytelling. Through short, focused tasks, participants experiment with key concepts like difficulty progression, decision-making, worldbuilding, or the relationship between mechanics and narrative. This activity allows for quick analysis and prototyping of ideas, encouraging critical reflection on design and its impact on the player experience.

Full-or-part-time: 10h

Laboratory classes: 10h

GRADING SYSTEM

Game Jam Exams: 60% of the grade, 10% per jam

Final exam: 30% of the grade

Participation and learning attitude: 10%.

Students who do not pass the subject through continuous assessment may take the resit exam, provided they do not have an NP (Not Present) grade. This exam will reassess the marks corresponding to the final exam.

Irregular actions that may lead to a significant variation in the grade of one or more students constitute fraudulent conduct in an assessment activity. This action entails a descriptive grade of "fail" and a numerical grade of 0 in the overall ordinary assessment of the subject, with no right to a resit.

If lecturers suspect the use of unauthorized AI tools in assessment tests, they may summon the students involved to an oral exam or a meeting to verify authorship.

EXAMINATION RULES.

The exercises, once completed, must be returned to the Virtual Campus in the corresponding delivery and date thereof.

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:

- Silverstein, J.; Sholes, K. The Kobold guide to worldbuilding. Kirkland, WA: Kobol Press, 2012. ISBN 9781936781119.
- Qué es el juego de rol. Barcelona: Troll, 1987.
- Michael Sellers. Advanced Game Design. Pearson, 2018.

RESOURCES

Hyperlink:

- <https://gamebalanceconcepts.wordpress.com/>. Game balance concepts