Course guide
804242 - GAM - Gamification

Last modified: 22/07/2025

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

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

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

LECTURER

Coordinating lecturer: Joan Arnedo

Others: Joan Arnedo
Noemí Blanch

PRIOR SKILLS

You need to have a solid knowledge of game design.

TEACHING METHODOLOGY

The course is based on a very practical and experiential training based on the game from a triple perspective:

- The playful as a necessary varnish for training.
- The use of game elements in the design of the subject.
- The game and its dynamics as a starting point to work on the theoretical contents.

The theoretical contents are introduced by the teaching staff in conjunction with practical or analytical activities, where the student is the one who takes the initiative. In that sense, all classes are participatory and dynamic. Students intervene in their own class by carrying out activities, searching for information and raising doubts about the contents studied.

The theoretical contents are consolidated by carrying out two practical tasks, called challenges, which are of great importance within the subject. These are carried out during classes and, especially, autonomously from the guidance provided in class. The face-to-face classes are used as a coworking space where work teams receive feedback from both the teacher and the rest of the students.

It is worth emphasizing that this subject does not have a final exam (see section “grading system”). Due to its characteristics, the weight of the evaluation falls on the challenges and participation in class.

LEARNING OBJECTIVES OF THE SUBJECT

- To define the concepts involved in the design of video games and gamified processes: video game design, gamification, human factor and user-centered design.

- To 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.

- To 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.

- To design video games and playful processes aimed at both playful environments and areas that go beyond entertainment.

- To 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
Guided activities	12,0	8.00
Self study	90,0	60.00
Hours large group	18,0	12.00

Total learning time: 150 h

CONTENTS

What is gamification (and what isn't)?

Description:
Interpretation and definitions. Evolution of the term. What is a game? "Game" vs "play". Similar is not the same: toy, game, serious game, game-based learning, simulation, gamification and playful design.

Full-or-part-time: 14h
Theory classes: 1h
Practical classes: 2h
Guided activities: 1h
Self study : 10h

Psychology of Motivation

Description:
Description of the most relevant aspects of the psychological theories on motivation that serve as the basis for gamification. Extrinsic vs intrinsic motivation. Theory of self-determination. Flow cycles.

Related activities:
Challenge 1

Full-or-part-time: 20h
Theory classes: 3h
Practical classes: 4h
Guided activities: 1h
Self study : 12h

Types of players and the elements of gamification

Description:
The different classifications of the types of users and users or players in which to focus the design of gamification. Essential characteristics of each type. Classification and description of the gamification mechanics and elements available to the designer ("toolbox" approach). Link to the different types of players.

Related activities:
Challenge 1

Full-or-part-time: 18h
Theory classes: 3h
Practical classes: 2h
Guided activities: 1h
Self study : 12h

Ethical aspects of gamification

Description:
Ethical aspects of the psychology of motivation and the use of gamification. Reflection on cases in real life.

Related activities:
Challenge 1

Full-or-part-time: 7h
Theory classes: 1h
Self study : 6h

The design of gamification

Description:
Reflecting on PBL. Formal frameworks of the correct design of gamification by stages. Main features. Most important aspects in the design process. Canvas.

Related activities:
Challenge 2

Full-or-part-time: 38h
Theory classes: 4h
Practical classes: 10h
Guided activities: 4h
Self study : 20h

The definition stage

Description:
Game Thinking Techniques to think like a Game Designer. What problem do I want to solve? Defining the strategy. Hypothesis and empathy. Identifying habits.

Related activities:
Challenge 2

Full-or-part-time: 19h
Theory classes: 2h
Practical classes: 5h
Guided activities: 2h
Self study : 10h

The design stage

Description:
The mastery path or the user journey. Discovery, on-boarding, immersion and mastery. Narratives, metaphors and themes. Engagement loops. Choosing the right gamification elements.

Related activities:
Challenge 2

Full-or-part-time: 18h
Theory classes: 1h
Practical classes: 5h
Guided activities: 2h
Self study : 10h

The deploy and validate stage

Description:
How to create a balanced and balanced system. System modeling and prototyping. Playtesting. The journey of the creator. Research methods: qualitative vs quantitative. What does the science say about whether gamification works?

Related activities:
Challenge 2

Full-or-part-time: 16h
Theory classes: 3h
Practical classes: 2h
Guided activities: 1h
Self study : 10h

ACTIVITIES

Challenge 1. Research about gamified projects

Description:
Gamification is a methodology that can be applied to a wide variety of contexts to achieve different goals. For this challenge, the work team must decide the thematic area (health, education, fitness, business, etc.) on which to investigate the existence of gamified projects. Once this is done, look for an example of a gamified project within the chosen area, proposed by the student himself.

Specific objectives:
Develop the ability to analyze a gamified experience applied to an APP with mainly business objectives that implements various elements and gamification strategies. The exercise aims to familiarize the student with the identification and recognition of the structures that make up a gamification process, with the basic motivational factors and how these influence the complete design of an application.

Material:
- Notes of the subject
- Templates of the analysis activities carried out in class
- Bibliography of the subject
- Mobile device or computer

Delivery:
The delivery and evaluation is based both on a document where all the specified elements of analysis are contemplated in detail, and on the oral presentation of the work to the rest of the class.

Durant el curs, també es poden proposar sessions de seguiment o treball en equip en què és obligatori mostrar al professorat l'estat del projecte d'acord amb les vostres directrius. Tot i que aquestes sessions no siguin avaluables, i se centren exclusivament en el seguiment del projecte per oferir feedback, són obligatòries per poder ser avaluats del repte.

Full-or-part-time: 20h 50m
Theory classes: 5h
Self study: 15h 50m

Challenge 2: Construction of a gamified project.

Description:
Based on a proposal carried out by the team itself (think of a problem or environment that is in its day to day), you must develop a process of gamification, documenting and designing a prototype that presents the main dynamics of the game and gamification.

The proposal will have to consistently implement mechanics that favor the retention and loyalty of its players. This metagame will have to incorporate gamification mechanics correctly interrelated with the objectives sought in a non-playful context.

Specific objectives:
Being able to abstract the key elements of the video game experience and combine gamification techniques that cooperate to achieve the final result and desired behaviors. Understand the existing metagame dependencies, gamification and game design.

Material:
- Game Design Lenses Card Deck by Jesse Schell
- Periodic Table of Gamification Elements by Andrej Marczewski
- Game Thinking, by Amy Jo Kim
- Different forms of Canvas provided during the course.

Delivery:
The delivery and evaluation is based on a document with the gamification plan, following the stages of the design scheme of gamified experiences explained in class (Definition, Design and Validation), the oral presentation of the work to the rest of the class and the creation of navigable prototypes, "mockups" or schemes.

During the course, follow-up sessions or teamwork may also be proposed in which it is mandatory to show teachers the status of the project in accordance with their guidelines. Although these sessions are not evaluable, and focus exclusively on project monitoring to provide feedback, they are mandatory in order to be evaluated for the challenge.

Full-or-part-time: 20h 50m
Theory classes: 5h
Practical classes: 15h 50m

GRADING SYSTEM

- Projects:
Challenge 1: Initial research of a gamified project, with a weighting of 20% of the final grade of the subject.
Challenge 2: Construction of a gamified project, with a weighting of 45% of the final grade of the subject.

- Midterm Exam:
A midterm exam with a weighting of 25% of the final grade of the subject.

- Participation and voluntary tasks in class:
The ability to actively contribute ideas to class and participation in specific activities proposed by teachers is taken into account with up to 10% of the final grade of the course.

This note takes into account only those attitudes or activities that could be considered "beyond the call of duty" and not just attending class or completing tasks that would already be expected to be solved in class as part of the learning process.

- Re-evaluation:
Students who have failed the subject can take the re-assessment, regardless of the grade they have obtained (there is no minimum grade to be eligible, as long as the final grade is suspended, but different from NP).

In the case of this subject, the grade obtained in the re-assessment test replaces the mark obtained in the partial exam, only if it is higher. This fact can allow to pass the subject, always counting its maximum weight related to the total.

In any case, if you choose this route, the final grade of the subject may not exceed 5.

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.

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RESOURCES

Other resources:
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