Course guide
804250 - P3VJ - Project III

Last modified: 18/05/2026

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: 2026 **ECTS Credits:** 6.0 **Languages:** Catalan, English

LECTURER

Coordinating lecturer: Martín, Mónica

Others: Martín, Mónica
Ripoll, Marc
De Dios, Oriol
Garrigó, Marc
Stoyanov, Simon

TEACHING METHODOLOGY

The teacher will take the role of a studio owner and will ask for an idea to be developed. The students, working as a production team, will split into departments and work in the lines of a realistic game studio.

Following the SCRUM methodology, the teacher will evaluate every sprint individually.

LEARNING OBJECTIVES OF THE SUBJECT

- To recognise the concepts and procedures involved in managing video game creation projects.

- To demonstrate predisposition for active listening, both physical and mental, showing interest in the ideas and emotions of others.

- To apply instruments and techniques, both for generating ideas and management, in solving problems known differently and in creating opportunities in the field of video game design and development.

- To plan projects of casual video games, 2D video games and / or 3D video games, using project management tools as support.

- To make decisions about complex situations based on critical reflection, considering the ethical implications of actions.

- To collaborate effectively and responsibly as a member or leader of a team, in interdisciplinary contexts or not, considering the available resources.

- To identify biases, stereotypes and gender roles in their discipline and in the exercise of their profession.

- To collaborate with the main stakeholders and social, economic and environmental agents related to the activity of their professional field, identifying the needs, expectations and their involvement.

STUDY LOAD

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

Total learning time: 150 h

CONTENTS

Concept Discovery

Description:
First iteration on the technical documentation
Getting the technology required ready
First pass on the GDD

Full-or-part-time: 10h
Theory classes: 4h
Self study : 6h

Vertical Slice

Description:
First playable demo that test the basic technology needed.
Gameplay test and GDD iteration.
Testing the technology with biggest risks.

Full-or-part-time: 30h
Theory classes: 12h
Self study : 18h

Production Planning

Description:
Generation of all needed tasks for the development (backlog).
Estimation of all the tasks.
Risk management.

Full-or-part-time: 11h
Theory classes: 5h
Self study : 6h

Alpha 1

Description:
Creation of the first level of the game:
- Iteration in gameplay code / technology / UI
- Environment art / characters / animations
- Iteration in level design and player progression.

Full-or-part-time: 22h
Theory classes: 10h
Self study : 12h

Alpha 2

Description:
Repeating the same process from Alpha 1 to create the second level of the game:
- Retrospective and process improvement.
- Backlog review.

Full-or-part-time: 22h
Theory classes: 10h
Self study : 12h

Alpha 3

Description:
Repeating the same process from Alpha 1 to create the second level of the game:
- Retrospective and process improvement.
- Backlog review.
- Content creation for game last level.

Full-or-part-time: 22h
Theory classes: 10h
Self study : 12h

Polish

Description:
Last improvement to the game:
- Art polish.
- Code optimizations.
- Tide up documentation.

Full-or-part-time: 17h
Theory classes: 5h
Self study : 12h

Beta

Description:
Follow a strict beta process:
- Stabilization rounds.
- Bug distribution.
- Continuos integration.

Full-or-part-time: 16h
Theory classes: 4h
Self study : 12h

GRADING SYSTEM

Any academic fraud, plagiarism or use or possession of unauthorised means in an assessment activity leads to a mark of zero (0) for the affected test or assignment. Furthermore, in accordance with the University's regulations, if disciplinary proceedings are initiated the subject is recorded as "Pending Assessment" until a decision is reached. These incidents are managed in accordance with the **Action Framework for Academic Integrity in Assessment at the UPC**.

The subject is purely practical and will use an individualized evaluation per milestone:
Concept Discovery 5%
Vertical Slice 1 10%
Vertical Slice 2 10%
Alpha 1 10%
Alpha 2 10%
Alpha 3 10%
Beta 5%
Gold 30%
Actitud i Participació 10%

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.

BIBLIOGRAPHY

Basic:
- Keith, C. Agile game development with Scrum. Upper Saddle River: Addison-Wesley, 2010. ISBN 9780321618528.