

# Teaching guide

## IDENTIFICATION DETAILS

|                                      |   |               |       |
|--------------------------------------|---|---------------|-------|
| Degree:                              | Expert Technical Artist (UFV-Awarded Title associated with the Video Game Creation) |               |       |
| Faculty/School:                      | Senior Polytechnic School   |               |       |
| Course:                              |   |               |       |
| Type:                                | Compulsory Internal   | ECTS credits: | 3     |
| Year:                                | 1   | Code:         | 46111 |
| Teaching period:                     | Second semester   |               |       |
| Teaching type:                       | Classroom-based   |               |       |
| Language:                            | English   |               |       |
| Total number of student study hours: | 75  |               |       |

| Teaching staff      | E-mail              |
|---------------------|---------------------|
| Ana Calvillo Montes | ana.calvillo@ufv.es |

## SUBJECT DESCRIPTION

En esta asignatura veremos cómo se testea y equilibra el contenido dentro del videojuego. Veremos que procesos se han de seguir y como se han de seguir, qué información se le pasa a cada uno de los integrantes del equipo para su posterior proceso.

Como se comprueban los fallos, la recurrencia de los mismos y si son relevantes. Qué tipo de errores se van a encontrar, de gameplay, gráficos, de audio, de online, de memorias archivos corruptos, de controles, de texto, de voces...

Explicaré como se equilibra un juego en las distintas fases antes del lanzamiento, curva de dificultad, aprendizaje, balanceo de personajes recursos y análisis. El equilibrado en juegos simétricos y asimétricos.

Deep analysis of testing processes and tools, with a focus on localization, quality assurance and first party terminology compliance.

In this class we will see how to test and balance the content inside videogames, which processes to follow, the bug writting standards and the chain of information within the development team for their further processing.

We will learn to check for errors and their relevance. Bug typology: gameplay, graphics, performance, data corruption, controls, text, audio...

We will explain how to balance a game in the different phases before launch, the learning curve, difficulty levels,

balancing of characters and analysis.

## GOAL

To equip the students with analytical abilities in game testing and balancing so they can create excellent gaming experiences.

Generate interest for excellence and strive for a polished finish, exercising their attention to detail.

## PRIOR KNOWLEDGE

To be able to take on this subject the student needs to be aware of the basic processes behind videogame development.

## COURSE SYLLABUS

### 1. Videogame testing

Videogame testing explained through its 3 basic pillars: QA, LT & Compliance/Certification.

#### 1.1 Introduction to videogame testing

- Development calendar: Milestones, Gates; Alpha, Beta, Final
- Understanding QA, LT, Compliance & Certification.
- Documentation: Design docs, Confluence & Sharepoint

#### 1.2 - Content testing

##### 1.2.1- QA (Quality Assurance)

- Bug reports and bugtrackers
- Severity and priority

##### 1.2.3- LT (Linguistic Testing)

- Typology
- Internacionalization (i18n)

##### 1.2.4 - Compliance/Certification.

Guidelines: PC and consoles. Test Cases.

##### 1.2.5 - Audio testing

- Casting
- Scripts & metadata.
- Audio and localization recording flow

#### 1.3- Test plan creation

Coverage tools (Checklist).

### 2. Videogame balancing

Most usual ways of balancing videogames and archetypes to distribute features. These systems, when predefined in early stages, make polishing easier.

#### 2.1 Symmetrical and Asymmetrical (MOBAs, Pay-to-win).

## EDUCATION ACTIVITIES

**PARTICIPATORY MASTER CLASS:** Differs from the classic master class, where the main weight lays on the teacher, as in the participatory MC we look for the student to have an active attitude instead of passive, making their participation easier. For this to happen it is needed that the teacher prepares a solid content structure, is able to explain clearly and is able to maintain attention and interest from the students.

**AUTONOMOUS WORK.** With this methodology the student drives the initiative with or without the help of others (teachers, tutors, colleagues...). It is the student who diagnoses their learning needs and goals and identifies the

resources needed to learn. He picks and implements the adequate learning strategies and evaluates the results of their learning. The teacher becomes the guide, facilitator and source of information that collaborates with this autonomous work. This methodology is primarily interesting for the development of abilities related to investigation.

**COOPERATIVE WORK IN SMALL GROUPS:** The number of students per class in our university helps us to work in small groups. Slavin defines cooperative work as "instruction strategies where the students are divided in small groups and are evaluated based in the group's productivity", which enables both individual responsibility and positive interdependency, the basis for professional cooperative work.

**CASE METHODOLOGY:** Learning through case analysis or real world management situations. This active learning technique centers on the student's investigation on a real and specific problem, and helps the student to get the base of inductive study.

**PROBLEM SOLVING LEARNING:** The teacher proposes a problem without providing specific information beforehand. The students have to work on the problem individually, virtually or in groups, and then is followed up by the student individually.

## DISTRIBUTION OF WORK TIME

| CLASSROOM-BASED ACTIVITY | INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY |
|--------------------------|---|
| 30 hours                 | 45 hours                                    |

## SKILLS

Students have proven to have and understand knowledge in the area of videogame testing at a professional level to analyze and improve the work of each department inside game development.

Students know how to apply the knowledge to their work in a professional capacity and they have the competences needed to elaborate reports that help the development team.

Students have the ability to gather and interpret data to generate reports to include relevant conclusions presented in a professional manner.

Students have the ability to express themselves in a multidisciplinary team with common objectives, using the appropriate language for each area.

Students have the ability to express themselves efficiently to share information and knowledge both in the academic and work environments.

Students have exactitude when creating documentation and ability to follow and adapt testing plans.

## LEARNING RESULTS

Create testing reports understandable for all teams

Able to examine balancing in symmetrical and asymmetrical games

Able to communicate clearly testing and balancing concepts to the rest of the team.

Able to distinguish among the typologies of bugs that affect videogame development and their severity.

## LEARNING APPRAISAL SYSTEM

Regular evaluation through continuous evaluation, which has to meet the following:

- Students need a minimum of 5 on each of the qualifying items in order to be eligible to pass.
- Minimum attendance 80%.

Qualifying items:

- Group projects and tasks: 40%
- Individual projects and tasks: 35%
- Lab work: 25%

Extraordinary evaluation:

- Delivery of assigned projects and tasks

## **BIBLIOGRAPHY AND OTHER RESOURCES**

### **Basic**

Level UP! Scott Rogers

Theory of Fun for Game Design - Raph Koster

The Art of Game Design: A book of lenses - Schell

Rules of Play: Game Design Fundamentals - Salen/Zimmerman

La localización de videojuegos: un caso de colaboración interdisciplinaria de Carola Álvarez-Bolado Sánchez y Gema Almoguera Navarrete

### **Additional**

Game Development Essentials: Game Qa & Testing de Luis Levy

Game Testing: All in One Paperback de Charles P. Schultz

Localization Engineering: The Dream Job? de Bert Esselink

Game Localisation: Unleashing Imagination with 'Restricted' Translation de Mangiron, C. y O'Hagan