

Teaching guide

IDENTIFICATION DETAILS

Degree:	Expert Technical Artist (UFV-Awarded Title associated with the Video Game Creation)		
Faculty/School:	Communication Science		
Course:	GAME TESTING AND ADJUSTMENT		
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
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SUBJECT DESCRIPTION

Videogame testing and balancing are key factors to the success of a game.

We will follow the milestones of the development calendar to see how strategic decisions impact all functions and how testing has an overall impact on what can be finally achieved, being a layer of quality control, plus a safety net for both time and scope issues.

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 writing standards and the chain of information within the development team for their further processing.

We will learn to check for errors and their relevance and 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

Videogame testing

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

1. Introduction to videogame testing

- 1.1 - Development calendar: Milestones, Gates; Alpha, Beta, Final
- 1.2 - Documentation: Design docs, Confluence & Sharepoint
- 1.3 - Practice: The definition of Done.

2. Content testing - Understanding QA

- 2.1 - QA (Quality Assurance)
- 2.2 - Bug reports and bug trackers, severity and priority.
- 2.3 - Practice: QA Testing Project

3. Linguistic Testing

- 3.1 - Typology
- 3.2 - Internationalization (i18n)
- 3.3 - Practice: LT Quiz

4. Audio testing

- 4.1 - Practice: Casting
- 4.2 - Scripts & metadata.
- 4.3 - Audio and localization recording flow

5. Test plan creation

- 5.1 - Coverage tools
- 5.2 - Practice - Test plan

6. Compliance/Certification.

- 6.1 - Guidelines: PC and consoles.
- 6.2 - Test Cases.
- 6.3 - Practice: PC Guideline pass.

7. Videogame balancing

- 7.1 - Cheats
- 7.2 - Game theory, symmetry and asymmetry.
- 7.3 - Practice: Balancing a simple game.

EDUCATION ACTIVITIES

“Las actividades formativas, así como la distribución de los tiempos de trabajo, pueden verse modificadas y adaptadas en función de los distintos escenarios establecidos siguiendo las indicaciones de las autoridades sanitarias”.

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 can 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 (May) Exams

- QA practice: 40% - This practice is started in class and to be finished independently & delivered online for grading, mid-course.
- Presential exam day: 60% - Based on the curriculum taught.

Round up accounting for class participation and attendance.

Extraordinary evaluation (June)

- Presential exam day: 100% - Based on the full curriculum taught.
- No grading from previous exercises count on the extraordinary evaluation.

Alternative evaluation system (siguiendo las indicaciones de las autoridades sanitarias en un escenario de confinamiento)

Qualifying items (May)

- QA practice: 40% - This practice is started in class and to be finished independently & delivered online for grading, mid-course.
- Test plan practice: 60% - Based on the curriculum taught, this task is uploaded to the class on the day before the exam to be delivered upon deadline

Round up accounting for class participation and attendance.

Extraordinary evaluation (June)

- Delivery of assigned projects and tasks, comprehensive practice for all items on the curriculum: 100%

No grading from previous exercises count on the extraordinary evaluation.

Las conductas de plagio, así como el uso de medios ilegítimos en las pruebas de evaluación, serán sancionados conforme a los establecido en la Normativa de Evaluación y la Normativa de Convivencia de la universidad.

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 Sánchezy 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