

# Course guide 804241 - DISVJ2 - Game Design II

Last modified: 11/09/2024

Unit in charge: Teaching unit:	Image Processing and Multimedia Technology Centre 804 - CITM - Image Processing and Multimedia Technology Centre.		
Degree:	BACHELOR'S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Compulsory subject).		
Academic year: 2024	ECTS Credits: 6.0	Languages: Catalan, English	

LECTURER	
Coordinating lecturer:	Loepfe, Lasse
Others:	Grau, Tomás

# **PRIOR SKILLS**

Teamwork and planning. Creative and communicative abilities.

### REQUIREMENTS

Games and videogames culture, videogames industry.

# **DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES**

#### **Specific:**

CEVJ 3. Apply graphic interface design methodologies in an interactive application based on usability and accessibility criteria, taking the various platforms to which it can be directed into account.

CEVJ 4. Identify and use gameplay mechanics and dynamics in non-gaming environments to enhance motivation, concentration, effort and loyalty in a wide range of sectors including education, marketing, business and health and sport.

CEVJ 1. Design the mechanics, rules, structure, script and artistic concept of a video game, maximising immersion and criteria of playability and balance to provide the best possible user experience.

#### Transversal:

04 COE N3. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.

05 TEQ N3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.

03 TLG. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

06 URI N3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

07 AAT N3. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.



### **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

 $\cdot$  Create fictional worlds from which a PI can be built.

 $\cdot$  Show the knowledge of the standards and the rules related to the applications and computer systems, usability, accessibility, gameplay and the design method focused on the end user.

 $\cdot$  Show understanding of the concept Game Design and other basic concepts involved and be able to design video games using the documentation and technological resources necessary.

• Show understanding of the concept human factor, of the mechanisms and psychological processes involved and be able to apply the knowledge in the decision-making process during the development of video games.

 $\cdot$  Show understanding and expertise in the Design method focused on the User and the procedures, techniques and technologies involved and be able to apply it in the video game design process and development.

 $\cdot$  Show understanding and accept the social commitment of the guidelines, specially the ones related to accessibility, and be able to apply them properly to each interactive application or video game in its creation process.

 $\cdot$  Show understanding of the interactive narrative elements in video games and the ability to apply these methods and techniques in the development of such games.

 $\cdot$  Show understanding of the relationships between culture, society and video games. And between the typologies and characteristics of the video games with the cultural and socials ones from society, it is being produced and played. Be able to apply this knowledge to the analysis of video games.

 $\cdot$  Use strategies to prepare and undertake the oral presentations and written text documents with a coherent content, an adequate structure and style and a good spelling and grammar levels.

 $\cdot$  Be able to communicate in a clear and efficient way in oral and written presentations, each one adapted to the type of public and the objectives of the communications, while using the proper strategies and mediums.

 $\cdot$  Contribute to consolidate the team by planning objectives, working efficiently and favoring the communication, task distribution and cohesion.

 $\cdot$  Conduct the assigned tasks from the basic orientations given by the professors. Deciding how much time it takes to complete them, including personal contributions and expanding the information sources indicated.

• Apply the knowledge acquired in the realization of a task based in the relevance and decide how to undertake, the time needed and selecting the proper information sources.

 $\cdot$  Demonstrate enough reading comprehension in the reading of the documents written in English, linked to the lessons, like notes, articles, webs, etc



# STUDY LOAD

Туре	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
- $\ast$  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

 $\ast$  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

### Worldbuilding: Creating a fantastic world

**Description:** 

First installment - Worldbuilding: Creation of a fantastic world and its economy (15% of the grade)

Material: 1 pdf 8 pages

**Delivery:** Atenea

**Full-or-part-time:** 20h Self study: 20h

#### Simulation and core mechanics

Description:

Design of a core game mechanics and balancing through simulations (15% of the grade)

Material: 1 pdf 25-50 pages

**Delivery:** Campus virtual

Full-or-part-time: 20h Self study: 20h

# Conflict

**Description:** Design of the characters or factions that come into conflict and the battle system (15% of the grade)

Full-or-part-time: 20h Self study: 20h



### **GRADING SYSTEM**

- 1. First delivery: 15% of the final grade.
- 2. Second installment: 15% of the final grade.
- 3. Third installment: 15% of the final grade.

The assignments are developed in groups and must be defended personally in a class presentation. Each student must be able to answer the questions on the entire subject of the assignments to obtain the established grade.

- 4. Final exam: 25% of the final grade (this is the only part that can be made up in the make-up exam).
- 5. Active participation in the "game jam" sessions and the thematic presentation: 20%.
- 6. Participation and learning attitude: 10%.

Students who do not pass the course through continuous evaluation may access the reevaluation exam, provided that they do not have a grade of NP. In this exam, the grades corresponding to the final exam will be reevaluated.

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 act 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 can summon the students concerned to an oral test or to a meeting to verify the 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:

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