

Course guide

804421 - NTR - Real Time Narrative

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). (Optional subject). BACHELOR'S DEGREE IN DESIGN, ANIMATION AND DIGITAL ART (Syllabus 2023). (Optional subject). BACHELOR'S DEGREE IN DIGITAL DESIGN AND MULTIMEDIA TECHNOLOGIES (Syllabus 2023). (Optional subject).

Academic year: 2026 **ECTS Credits:** 6.0 **Languages:** Spanish

LECTURER

Coordinating lecturer: Marta Fernández

Others: Marta Fernández
Pedro Omedas

TEACHING METHODOLOGY

- Participatory master class: Structured transmission of contents by the teacher, combined with strategies that favor the active participation of the students (open questions, small exercises, challenges, debates, etc).
- Case study. The lecturer presents orally and in writing a case related to a specific project, topic or practice related to the contents that are being taught in the subject. Cases describe the problem and provide data.
- Project-based learning. Students apply to the development of the project the knowledge learned in other subjects or subjects and seek information, consult with the teacher and learn new knowledge applicable to the project. Part of this project development work is developed during the classes, in this case the work is oriented and supervised by the teacher. Another part is developed as a team, during class hours or during hours of autonomous work. Finally, another part is individual work for the subsequent sharing.
- Inquiry-based learning: students explore open questions, investigate, contrast sources and build knowledge through the inquiry process for the creation of a functional prototype of interactive narrative.
- Autonomous work. Students work autonomously, outside class hours, studying, reading, solving exercises or problems, developing practices.

LEARNING OBJECTIVES OF THE SUBJECT

- To define the elements of interactive and emerging narration.
- To identify the fundamentals of transmedia narrative.
- To integrate the elements of interactive and emerging narration in the design and development of interactive graphic applications in real time for different media, platforms and devices.
- To implement a transmedia strategy for existing or new products.
- Clear and efficient communication in both oral and written presentations. Adapting the presentations to the type of audience and the communication goals using the appropriate strategies and means.
- Directing work groups, solving possible conflicts, evaluating the work done with other people and evaluating the effectiveness of the team as well as the presentation of the results generated.

STUDY LOAD

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

Total learning time: 150 h

CONTENTS

Theme 1. Introduction to Interactive Storytelling

Description:

- Story and narrative structures
- Properties of interactive digital environments
- The myth of the Holodeck: agency and immersion

Full-or-part-time: 39h

Practical classes: 10h

Guided activities: 6h

Self study : 23h

Theme 2. Narrative Design

Description:

- Narrative designer's role
- Fictional worlds
- Structured narrative
- Emerging narrative
- Procedural narrative
- Case studies: role playing games, video games, theatre

Full-or-part-time: 8h

Theory classes: 2h

Guided activities: 4h

Self study : 2h

Tema 3. Interactive Narrative and Emerging Technologies

Description:

- Industry 4.0
- XR: from narrativity to experientiality
- AI: computational creativity and automatic story generation
- Sensors and adaptive narratives

Full-or-part-time: 29h

Practical classes: 8h

Guided activities: 6h

Self study : 15h

Tema 4. Virtual Production

Description:

- Machinima, digital puppets and real-time animation.
- Virtual production as a paradigm in the audiovisual production cycle (changes in the production pipeline, benefits compared to traditional audiovisual production, types of virtual production).
- Applications of virtual production (audiovisual fiction, performing arts, museums, interactive installations, digital twins, serious applications).

Full-or-part-time: 17h

Theory classes: 2h

Self study : 15h

Tema 5. Prototyping and Experience Testing of Interactive Narrative

Description:

Conceptualization and development of an application that simulates an interactive narrative experience.

Full-or-part-time: 57h

Practical classes: 22h

Self study : 35h

ACTIVITIES

Designing an interactive digital narrative experience

Description:

Group activity consisting of the conceptualization, narrative development and presentation of an interactive experience developed by means of a game engine.

Full-or-part-time: 15h

Practical classes: 10h

Self study: 5h

Mid-term presentation of the experience's prototype

Description:

Presentation of the first version of a prototype implementing part of the designed narrative experience.

Full-or-part-time: 22h

Practical classes: 22h

Final Presentation of the Prototype

Description:

Delivery and presentation of the final interactive narrative prototype.

Full-or-part-time: 30h

Practical classes: 30h

GRADING SYSTEM

- Mid-term exam: 25%
- Assignment 1 (interactive project conceptualization, narrative development and presentation): 25%
- Assignment 2 (intermediate presentation of the prototype): 15%
- Assignment 4 (final presentation of the project and alpha version of the prototype): 25%
- Attitude towards learning: 10%

Students' learning attitude will be evaluated by monitoring their interventions and activities developed during the class sessions.

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.

EXAMINATION RULES.

- Once completed, the activities must be delivered to the Virtual Campus in the corresponding delivery and on the corresponding date.
- The evaluation of the activities does not only imply their resolution, but also the presentation of the results (when the student or the group is required to do so during the classes).
- The documents must be completed following the instructions given, especially with regard to the names of the files and the content structure. The correct management of the documentation provided is an aspect related to the skills to be acquired and is, therefore, subject to evaluation.

BIBLIOGRAPHY

Basic:

- Koenitz, Hartmut. Understanding interactive digital narrative : immersive expressions for a complex time. Routledge, 2023.
- Koenitz, Hartmut; Ferri, Gabriele; Haahr, M; Sezen, Digidem y Sezen, Tonguc Ibrahim. Interactive Digital Narrative. History, Theory and Practice. Routledge, 2017.
- Murray, Janet. Hamlet on the Holodeck. Updated Edition. The MIT Press, 2017.
- Laurel, Brenda. Computers as Thatre. Addison-Wesley, 1993.
- Short, Tanya; Adams, Tarn. Procedural Storytelling in Game Design. CRC Press, 2019.
- Nicklin, Hannah. Writing for games: Theory and Practice. CRC Press, 2022.
- Anthropy, Anna. Make Your Own Twine Games!. No Starch Press, 2019.
- Sharples, Mike; Pérez y Pérez, Rafael. Story Machines: How Computers Have Become Creative Writers. London y Nueva York: Routledge, 2021.

RESOURCES

Other resources:

Additional recommended bibliography:

- Bittanti, M. Machinima is not a Game. Matteo Bittanti's Blog.
- Cuadrado, A. y Planells, A. (2020). Ficción y videojuegos. Teoría y Práctica De La Ludonarración. UOC Press.
- Deterding, S. y Zagal, J. (2024). Role-Playing Game Studies: Transmedia Foundations. Routledge.
- Fernández-Vara. C. (2020). Elecciones. Diseño narrativo de decisiones y ramificaciones. En Navarro Remesal, V. (Ed.). Pensar el Juego. 25 Caminos para los Game Studies. Ludografías. Shangrila.
- Lowood, H. y Nitsche, M. (2011). The Machinima Reader. The MIT Press.



- Manovich, L. (2024). Artificial Aesthetics: Generative AI, Art and Visual Media. <https://manovich.net/index.php/projects/artificial-aesthetics>
- Martín Núñez, M. y Porta Pérez, A. (2022). Puzzles dramáticos. Decisiones críticas, dilemas éticos y narrativas complejas en el videojuego. Con A de Animación, 14, 40 - 57.
- Short, T. y Adams, T. (2019). Procedural Storytelling in Game Design. Routledge.
- Suter, B., Bauer, R., Kocher, M. (2021). Narrative Mechanics. Strategies and Meanings in Games and Real Life. Transcript.
- Twelves, K. (2021). Técnicas de Improvisación para Juegos de Rol. Shadowlands.

Other resources:

- Fernández-Vara, C. Narrative Choices Taxonomy. <https://clarafv.itch.io/taxonomia-de-elecciones-narrativas>
- <https://assetstore.unity.com/> />
- <https://www.cgtrader.com/free-3d-models> />
- <https://freesound.org/> />