

Course guide

804354 - NAVETR - Real-Time Narratives

Last modified: 23/07/2025

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| Unit in charge: | Image Processing and Multimedia Technology Centre | |
| Teaching unit: | 804 - CITM - Image Processing and Multimedia Technology Centre. | |
| Degree: | BACHELOR'S DEGREE IN MULTIMEDIA STUDIES (Syllabus 2009). (Optional subject). BACHELOR'S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Optional subject). BACHELOR'S DEGREE IN DESIGN, ANIMATION AND DIGITAL ART (Syllabus 2017). (Optional subject). | |
| Academic year: 2025 | ECTS Credits: 6.0 | Languages: Spanish |

LECTURER

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| 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.

STUDY LOAD

| Type | Hours | Percentage |
|--------------------|-------|------------|
| Guided activities | 20,0 | 13.33 |
| Hours medium group | 40,0 | 26.67 |
| Self study | 90,0 | 60.00 |

Total learning time: 150 h

CONTENTS

Theme 1. Interactive Storytelling

Description:

- Properties of interactive digital environments
- The myth of the Holodeck: agency and immersion
- Non-linear and multiform stories
- Structured and emergent narrative
- Narrative design: fictional worlds, backstories, character sheets, dialogues, flowcharts

Full-or-part-time: 39h

Practical classes: 10h

Guided activities: 6h

Self study : 23h

Tema 2. Interactive Narrative, Mediatic Context and Emerging Technologies

Description:

- Industry 4.0
- Media convergence.
- 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 3. 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: 19h

Practical classes: 4h

Self study : 15h



Tema 4. Prototyping and Experience Testing of Interactive Narrative

Description:

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

Full-or-part-time: 63h

Practical classes: 22h

Self study : 41h

ACTIVITIES

Assignment 1

Description:

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

Full-or-part-time: 15h

Practical classes: 10h

Self study: 5h

Assignment 2

Description:

Intermediate presentation of the project.

Delivery of the alpha version of a prototype implementing the designed narrative experience.

Full-or-part-time: 22h

Practical classes: 22h

Assignment 3

Description:

Delivery 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 and narrative development): 20%
- Assignment 2 (intermediate presentation of the project and alpha version of the prototype): 20%
- 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.
- Students will dedicate autonomous work time (outside class hours) to carry out these activities.
- 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; 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.
- Sharples, Mike; Pérez y Pérez, Rafael. Story Machines: How Computers Have Become Creative Writers. London y Nueva York: Routledge, 2022.
- Koenitz, Hartmut. Understanding interactive digital narrative : immersive expressions for a complex time. Routledge, 2023.
- Short, Tanya; Adams, Tarn. Procedural Storytelling in Game Design. CRC Press, 2019.
- Nicklin, Hannah. Writing for games: Theory and Practice. CRC Press, 2022.

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/> />