

Game Development

Academic Year: (2023 / 2024)

Review date: 19-05-2022

Department assigned to the subject: Computer Science and Engineering Department

Coordinating teacher: ZARRAONANDIA AYO, TELMO AGUSTIN

Type: Electives ECTS Credits : 3.0

Year : 4 Semester :

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

- Programming (Course: 1 / Semester: 1)

OBJECTIVES

The objective of the course is to provide students with an introduction to the design and development of videogames.

DESCRIPTION OF CONTENTS: PROGRAMME

- Introduction to game design and development
- Architecture and main elements of a videogame
- Videogame programming fundamentals: game objects, behaviours, physics, UI y particle systems.
- Development frameworks and game engines

LEARNING ACTIVITIES AND METHODOLOGY

- * Theoretical lectures: 0,5 ECTS. To achieve the specific cognitive competences of the course. Besides, to develop transversal competences as capacity to analysis and abstraction.
- * Practical lectures: 0,5 ECTS. To develop the specific instrumental competences. Besides, to develop transversal competences as problem solving and knowledge application.
- * Continuous assessment exercises: 0,5 ECTS. Initiated during the practical sessions and finished out of them. Their objective is to complete the development of the specific instrumental competences and to initiate the development of the attitudinal specific competences as well as the transversal competences on problem solving and knowledge application.
- * Practice: 1 ECTS. Carried out without the presence of the teacher. Their objective is to complete and integrate the development of the specific competences and transversal competences by means of practice cases in which the problem, solving method, criteria for selecting the solving method, the results and their interpretation are well documented.
- * Tutorships: Teacher assistance
- * Exercises and examination: 0,5 ECTS. To complete the development of specific cognitive and procedural capacities

ASSESSMENT SYSTEM

The evaluation system includes the assessment of guided academic activities and practical cases, with the following weights:

Practical case: 70%

Examination: 30%

% end-of-term-examination:	30
% of continuous assessment (assignments, laboratory, practicals...):	70

BASIC BIBLIOGRAPHY

- HOCKING, Joseph Unity in action: Multiplatform game development in C# , Manning Publ., 2015
- Salen, K., Tekinbağ, K. S., & Zimmerman, E. Rules of play: Game design fundamentals, MIT Press, 2004

