Game Development

Academic Year: (2020 / 2021)

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)

Object Oriented Programming, Algorithms and Data Structures

OBJECTIVES

The ability to design and develop systems and communication software. (CEIC4)

DESCRIPTION OF CONTENTS: PROGRAMME

An introduction to game development for students interested in the technical aspects of making video games. This course provides the technical background to develop a game using Unity. Also, students will learn the rudiments of game design.

- 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

- Theory. The course will be given through lectures to introduce the basic concepts of the subject. Active participation of students and discussion will be encouraged.

- Practical exercises and computer sessions. Lectures will be complemented with practical sessions in computer rooms where practical exercises will be done, allowing to apply the theoretical knowledge.

ASSESSMENT SYSTEM

The evaluation system includes the assessment of guided academic activities and practical cases, with the following weights: Practical case: 80%

Examination: 20%

% end-of-term-examination:	20
% of continuous assessment (assigments, laboratory, practicals):	80

BASIC BIBLIOGRAPHY

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