Course Unit Descriptor

Study Programme: Graphic Engineering and Design

Course Unit Title: Fundamentals of Computer Games

Course Unit Code: F411

Name of Lecturer(s): Neda Milić

Type and Level of Studies: Bachelor Level

Course Status (compulsory/elective): compulsory

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 4

Prerequisites: None

Course Aims: The aim of the module is to teach the basics of computer game constructions. The students will learn to

make a computer game concept to develop the story line and characters as well to establish good game dynamics.

Learning Outcomes: The students will learn the basics of computer game development and in the practical classes they will make their own basic computer game

Syllabus: Purposes of Computer Games Today's Computer Game Industry (a multi-disciplinary industry) Player Motivation and Marketing Genres of Computer Games The Game Setting (History, Background, Storyline, and Setting of the Game) Types of Challenges in Computer Games Storytelling in Games Character Development in Games (both Avatars and NPCs) Gameplay Mechanics The Game Design Process and Design Documents Computer Game Engines (e.g. Torque, Game Maker, etc.) Building the Game World/Setting Textures and Image Manipulation (for creating/editing textures) Objects (both 2D and 3D) and Collisions Creating Static 3D Objects (called "Interiors" in Torque game engine)

Creating Dynamic (Animate-able) 3D Objects Employing Audio in Computer Games

Required Reading: Relevant literature in English TBD

Weekly Contact Hours: 4 Lectures: 2

Practical work: 0

Teaching Methods: The theoretical classes will encompass the basics of the game development theory with the focus on real world game examples. The computer classes will consist of work in a game development engine where students will learn to make their own computer game.

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Lecture attendance	5	written exam	40
Computer exercise	5	oral exam	30
attendance	5		50
Computer exercise	20		
defence			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.