## **Liverpool** John Moores University

Title: GAME PRODUCTION

Status: Definitive

Code: **6108COMP** (121268)

Version Start Date: 01-08-2021

Owning School/Faculty: Computer Science and Mathematics Teaching School/Faculty: Computer Science and Mathematics

Team	Leader
Abdennour El-Rhalibi	Υ

Academic Credit Total

Level: FHEQ6 Value: 20 Delivered 57

Hours:

Total Private

Learning 200 Study: 143

Hours:

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours	
Lecture	22	
Workshop	33	

**Grading Basis:** 40 %

#### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Level Design and In-game Cinematic	50	
Exam	AS2	Examination	50	2

### Aims

To describe the principles of the game production cycle and explain the issues relating to game production and approaches to managing game project.

To explain the principles and techniques of level design and provide opportunities for students to design and produce game environments with game-spaces.

To provide the underpinning knowledge, concepts and techniques of digital storytelling and cinematography for production of machinima and in-game

cinematics.

To develop the required skills in using approriate approaches and technologies in producing machinima and in-game cinematics.

## **Learning Outcomes**

After completing the module the student should be able to:

- Evaluate game production cycles, the team structure and approaches to managing a game project.
- 2 Critically analyse concepts and techniques for designing game-spaces, storytelling and cinematography.
- 3 Design and critically evaluate the playability, usability and theme of a game level.
- 4 Apply appropriate storytelling principles and cinematography techniques for digital game production.

# **Learning Outcomes of Assessments**

The assessment item list is assessed via the learning outcomes listed:

Level Design and 1 2

Cinematic

Examination 3 4

### **Outline Syllabus**

Game Production: Game Production Cycle (Pre-production, Production, Testing, Post-production), Roles in game production (Production roles, Art roles, Engineering roles, Design Roles, Audio Roles, Quality Assurance Roles, Team Organisation, Corporate), Project Management Methods, Managing Talents, Issues and Challenges.

Level Design: Elements of Level Design, Game-spaces, Architectural Spatial Arrangements, Historic Game-space Structures (Labyrinth, Maze and Rhizome), Size of Spatial Space, Sandbox Game-spaces, Visual communications in Level Design, Purpose-driven level design techniques (Events-draw-in spaces, Memorable spaces, Survival spaces, Opportunity spaces, Reward spaces and systems, Game spaces in storytelling), Pacing events and rewards, Experiential Choices, Social Interactions, Immersion and engagement in level design, Goals and Challenges.

Digital Storytelling: Principles of Storytelling (Model for Entertainment, Flow of Story, Structures for Story Delivery), Storytelling Frameworks (The Hero's Journey, The Heroine's Journey, Pixar Pitch, Characters and Archetypes) and Techniques for manipulating emotions for entertainment experiences, Methods for documenting story.

Cinematography: Types of Shots, Visual Language, Lens Language, Visual Storytelling, Cinematic Continuity, Lighting, Colour and Camera Movement.

Machinima and In-game cinematics: Machinima, Techniques for Machinimas (AI, Puppeteering, Recamming and Scripting), Application of Machinima techniques for in-game cinematics, Game Technologies enabling Machinima, Visual Effects for Games (Particle Systems, Organics and Foliage, Decals).

## **Learning Activities**

Lectures – to deliver the concepts, methodologies and techniques on game production and level design.

Workshop – Tutor-led workshop activities which will enable the students to practice the methods and techniques to design and protoype a game level.

Further exercises – additional exercises for students to work on in their own time.

Directed learning – provides additional reading to enable workshop work to be completed.

Learning materials can be accessed digitally via University Virtual Learning Environment (VLE).

#### **Notes**

This module will cover aspects of game production with a strong focus on production of game level using a game engine. It will also cover aspects of level design from an architectural perspective and the application of storytelling, cinematography and machinima to improve play experience of the game level. In the coursework, students will be working in a team to produce game levels with real-time cinematic and applying the techniques and principles learnt while managing the complexity of the game production process. In the coursework, students will be working in a team taking roles within the game design and production department to produce game levels with real-time cinematic and applying the techniques and principles learnt while managing the complexity of the game production process.