

## Liverpool John Moores University

Title: Game Audio  
Status: Definitive  
Code: **6543STE** (126180)  
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering  
Teaching School/Faculty: Liverpool Institute for Performing Arts

Team	Leader
Karl Jones	

**Academic Level:** FHEQ6  
**Credit Value:** 10  
**Total Delivered Hours:** 40  
**Total Learning Hours:** 100  
**Private Study:** 60

### Delivery Options

Course typically offered: Semester 2

Component	Contact Hours
Lecture	10
Tutorial	10
Workshop	20

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Practice	Practice	Audio assets successfully integrated into a game engine for development.	100	

### Aims

*This module aims to introduce the basic techniques, skills and ideas needed to design and implement audio designs for computer games. It allows students to build on concepts and ideas studied in Audio Post Production, and apply these using the forms, conventions and professional practices in game audio development. In order to effectively understand audio workflow, the module also introduces students to simple development environments for games.*

## Learning Outcomes

After completing the module the student should be able to:

- 1 Employ generic and specialized software platforms to design and implement interactive audio in a game development environment.
- 2 Understand and evaluate the role of sound and music in interactive audio productions.
- 3 Apply professional practice to the collection, organization and presentation of audio assets for game development.

## Learning Outcomes of Assessments

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

Practice	1	2	3
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## Outline Syllabus

*Introduction to a Game Engine such as Unity*

*Navigating the Gem Engine Editor – creating and moving objects in 3D*

*Creating and optimizing audio assets for games*

*Importing and replacing assets in a Game Engine*

*Sound Integration – AudioSource component and introductory Java scripting*

*Understanding and using game engine tools – Gravity and Collision, Rigidbody Objects, Raycasting*

*Creating simple game mechanics*

*Linking visual processes and audio using scripting*

*Implementing interactivity in the use and application of spatial enhancement and reverb*

*Using realtime mixing in a Game Engine*

*Modifying hierarchy objects in runtime*

*Integrating middleware with a Game Engine*

*The language of music in games*

*Interactivity and music creation / editing – approaches and considerations*

## Learning Activities

The module will be delivered through lectures, practical workshops and tutorials. Lectures will concentrate on the theoretical aspect of the module, which will include analysis of extant games and their sound designs. Workshops will be 'hands on' practical sessions, which will deal with both operational skills and the application of these skills in relation to the topics covered in lectures.

## Notes

Jon Thornton is the Module Leader ([j.thornton@lipa.ac.uk](mailto:j.thornton@lipa.ac.uk))