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Wrexham University

Module specification

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Module Code	GME503
Module Title	Serious Games Design
Level	5
Credit value	20
Faculty	FACE
HECoS Code	101268
Cost Code	GAGM

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
BSc (Hons) Computer Game Development	Core
BSc (Hons) Computer Game Development (with Industrial Placement)	Core
BSc (Hons) Computer Game Design and Enterprise	Core
BSc (Hons) Computer Game Design and Enterprise (with Industrial Placement)	Core
BA (Hons) Game Art	Core
BA (Hons) Game Art (with Industrial Placement)	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	30 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	0 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	**30** hrs
Placement / work based learning	0 hrs

Learning and teaching hours	30 hrs
Guided independent study	170 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	10/05/2023
With effect from date	September 2023
Date and details of revision	March 24 Change of module code from COM565
Version number	2

Module aims

This module aims to introduce concepts of serious game design and development whilst relating it to the wider context of the games industry. This module examines the subject of serious games and its related terms such as gamification, applied games and simulation. Student will be expected to explore, identify and analyse strategies and technologies for serious game applications. Students will demonstrate and apply their knowledge and understanding of traditional game design through a development prototype with a real-world serious application.

Module Learning Outcomes - at the end of this module, students will be able to:

1	Analyse current and emerging developments in the application of serious games.
2	Apply serious game design principles and practices to contemporary game engine tools and technologies.
3	Design and develop a game prototype with an identifiable serious application.

Assessment

Indicative Assessment Tasks:

This section outlines the type of assessment task the student will be expected to complete as part of the module. More details will be made available in the relevant academic year module handbook. Coursework will take place throughout this module as a project with opportunities for research and investigation.

Students will initially be required to produce portfolio work that identifies and analyses current and emerging trends in serious game applications to demonstrate their key understanding of the threshold concepts of the module.

Students will submit a functional serious game prototype or demo at the end of the module which demonstrates key learning outcomes set within the assignment. In addition, in the body of work submitted for the assessment, students will be expected to produce a design

document which breaks down each milestone of the project and evidence of good workflow practices.

Indicative word count for written element(s) will be 1,600 words.

Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1, 2, 3	Portfolio	100%

Derogations

None

Learning and Teaching Strategies

In line with the Active Learning Framework, this module will be blended digitally with both a VLE and online community. Content will be available for students to access synchronously and asynchronously and may indicatively include first and third-party tutorials and videos, supporting files, online activities any additional content that supports their learning.

As this module progresses, the strategies will change to best support a diverse learning environment. Initially, the module will start with a heavier reliance on engaging tutor-led lectures, demonstrations, and workshops to ensure that the students get the relevant threshold concepts. As the module continues experiential and peer learning strategies will be encouraged as the students' progress with their coursework. Sessions will shift to more tutorial-based sessions to focus of formative feedback for individual student achievement.

Indicative Syllabus Outline

The syllabus will reflect contemporary software and practices and may change based on relevant concepts however and indicative outline could be as follows:

- Serious Game Design
- Simulation design and Applied Games
- Exergames and Training Applications
- Project Planning and Concept Discussion
- Game Industry best practices
- Game Design theories
- Research, design, and planning
- Leadership and team working skills
- 3D pipeline production and workflow
- Unreal Engine development

Indicative Bibliography:

Please note the essential reads and other indicative reading are subject to annual review and update. Please *ensure correct referencing format is being followed as per University Harvard Referencing Guidance.*

Essential Reads

Doerner, R. (2018), *Serious Games: Foundations, Concepts and Practice,* New York: Springer Publishing.

Other indicative reading

Cheruette, M. (2021), *Towards a Methodology for the Design of Serious Games,* Moldova: Sciencia Scripts.

Fullerton, T. (2018), *Game Design Workshop: A Playcentric Approach to Creating Innovative Games,* Fourth Edition, Boca-Raton: CRC Press

Romero, M.F., Sewell, B., Cataldi, L. (2022), *Blueprints visual scripting for Unreal Engine 5*, Third Edition, Birmingham: Packt Publishing.

Stahlke, S., Mirza-Babaei, P. (2022), *The Game Designer's Playbook: An Introduction to Game Interaction Design*, Oxford: Oxford University Press.