

Prifysgol Wreccsam Wrexham University

Module specification

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Module Code	GME405
Module Title	Game Environments and Narrative Design
Level	4
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	36 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	36 hrs
Placement / work based learning	0 hrs
Guided independent study	164 hrs
Module duration (total hours)	200 hrs



For office use only	
Initial approval date	30/08/2018
With effect from date	01/09/2018
Date and details of revision	10/05/2023 AB approval of revalidated Games suite March 2024 Module Code updated from COM453
Version number	4

Module aims

The aim of this module is to introduce students to the fundamentals of game environment design and the professional workflows used within the modern industry. Students will learn to develop ideas and designs in response to gameplay and narrative related problems and develop them from a concept stage through to full digital environments with narrative content. This design will be developed through a combination of 3D methods, tools and technologies that can be aligned directly to industry standard game engine environment workflows.

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

1	Identify concepts and strategies employed to create fit-for-purpose game environments
2	Relate game engine tools and techniques to game environment design.
3	Apply 3D environmental design workflow to a real-time game engine scenario.
4	Produce a narrative-rich game environment.

Assessment

Indicative Assessment Tasks:

Coursework will take place throughout this module as a single project workflow. Indicatively students may be required to research and explore existing environment design trends and how that may relate to a wider, holistic view of game development. Students will be required to use this knowledge to forward a new environment project.

Formative assessments will occur through several milestones throughout the module to ensure that students get the relevant feedback as the module progresses. These assessments will be largely based on the relevant concept, skills and design solutions required to meet the milestone.

Indicative word count for written element(s) will be 1,200 words.



Assessment number	Learning Outcomes to be met	Type of assessment	Weighting (%)
1	1, 2, 3, 4	Portfolio	100%

Derogations

None

Learning and Teaching Strategies

This module will initially rely on didactic elements to ensure the students understand the essential fundamentals of environment design and game engine editors. As students' progress their ideas, the module will shift to more tutorial-based sessions with informal support with guidance and group critique.

The teaching strategy for this module will change to best support the students during development, this can be presented in a form of theory-based lectures, tutorials, workshops and informal one to one support sessions.

Throughout the module, students will share work and will contribute constructively to feedback upon the work of their peers to form a community of practice. To complete this module, students will submit a portfolio of work which demonstrates the culmination of their project in response to set assignments. In addition to the body of work submitted for assessment, students will be expected to design, develop, and present a blocked-out level design.

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:

- Level Design Theories
- Game Industry best practices
- Case Studies & Analysis
- Project planning and Concept Discussion
- Reviews & Peer Critiquing
- Environment & Narrative Challenges
- Game Environment Workflows
- Game Engine Editor & Tools
- Greybox & Whitebox production
- Engine-based lighting strategies
- Dioramas & Worldbuilding
- Visual Scripting
- Shaders & Materials
- Asset Importing

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

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

Other indicative reading

Austin, T. (2021), *Narrative Environments and Experience Design: Space as a Medium of Communication*, London: Routledge Research in Design Studies.

Galauzin, A. (2016), *Preproduction Blueprint: How to Plan Game Environments and Level Designs*, Second Edition, South Carolina: CreateSpace.

Kelly, H. (2021), *Environment Art in the Game Industry: A Guide to Rich and Realistic Environments Using Substance Designer*, Boca Raton: CRC Press.

Kremers, R. (2009), *Level design: Concept, Theory, and Practice*, Massachusetts: A.K. Peters.

