

Module specification

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Module Code	COM748
Module Title	Dynamic Environments and Surface Art
Level	7
Credit value	20
Faculty	FAST
HECoS Code	101019
Cost Code	GACP

Programmes in which module to be offered

Programme title	Is the module core or option for this programme
MA Game Art	Core
MA Game Art (with Advanced Practice)	Core

Pre-requisites

None

Breakdown of module hours

Learning and teaching hours	12 hrs
Placement tutor support	0 hrs
Supervised learning e.g. practical classes, workshops	9 hrs
Project supervision (level 6 projects and dissertation modules only)	0 hrs
Total active learning and teaching hours	21 hrs
Placement / work based learning	0 hrs
Guided independent study	179 hrs
Module duration (total hours)	200 hrs

For office use only	
Initial approval date	August 2021
With effect from date	September 2023
Date and details of revision	10/05/2023 AB approval of revalidated Games suite

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Version number	2

Module aims

This module is designed to allow students to plan, research and develop their digital 2D and 3D environment design workflow in relation to their own specialisms. The aim of the module is to produce environment that showcases some form of dynamism and focus on surfaces. Indicatively this could be an in-engine environment with dynamic lighting/Animation or cutscene with VFX particles etc.

Students will be required to plan their module around subject specialisms to research and forward relevant concepts through their own work. Documentation will be assembled throughout to showcase professionalism and students will finish the process with a high-quality portfolio piece.

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

1	Compose an independent plan of study that demonstrates both research and development of a game industry-relevant subject specialism.
2	Design a dynamic, digital environment that demonstrates artistic style and contemporary asset development techniques
3	Assemble comprehensive design and workflow documentation and engage in reflective practice to inform ongoing professional work.
4	Integrate environmental work into an industry standard portfolio platform that demonstrates dynamism and speciality focus.

Assessment

Indicative Assessment Tasks:

Coursework will take place throughout this module as a single creative workflow. Students will be required to research and/or create a case study to identify their specialist area/process. Throughout the module several milestones will be planned (indicatively, this could be a milestone every 3-4 weeks). Assessment will occur at each of these milestones to ensure that students get the relevant feedback as the module progresses. An early milestone of this module will represent an equivalent of a proposal of study along with validity of subject area/specialism.

This assessment will be largely based on the relevant concepts, skills and design solutions required to meet that milestone. Throughout the module students will be required to document their on-going creative processes and finalise this with reflective practice to influence their ongoing practice.

These assessment milestones may vary with differences in style, workflow, and technologies but indicatively these milestones may feature the following steps:

- Exploratory Case study/Evaluation of existing content and material.
- Proposal of viable product.
- Development and refinement of concepts through design work.
- Finalisation and integration of work within final platform.
- Showcasing or promoting product through engine and/or portfolio.

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

As this module focuses on individual student research and practice, there may be key concept areas that will be covered with didactic elements, but the majority of the contact time will be student led. Indicative research areas:

- Hard & Soft Surface Rendering Technology
- Physical Based Rendering
- Game Engine Implementation
- Level Design & Dioramas
- Architecture
- Environment Design
- Lighting and VFX
- Digital Painting
- Texture & Material 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

Damarjian, A. (2021), *Game Environment Art: A Path to the Games Industry*, Florida: CRC Publishing.

Other indicative reading

Li, J., Arevalo, K., Tovar, M. (2021), *Creating games with Unreal Engine, Substance Painter, & Maya: Models, Textures, Animation, & Blueprint*. Boca Raton: CRC Press.

McDermott, W. (2018), *The PBR Guide: A Handbook for Physically Based Rendering*, Clermont-Ferrand: Allegorithmic.

Murdock, K. (2020), *Autodesk Maya 2020 Basics Guide*, Kansas: SDC Publishing

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

Totten, C. W., (2014), *An Architectural Approach to Level Design*, Second Edition, London: CRC Press.

Employability skills – the Glyndŵr Graduate

Each module and programme is designed to cover core Glyndŵr Graduate Attributes with the aim that each Graduate will leave Glyndŵr having achieved key employability skills as part of their study. The following attributes will be covered within this module either through the content or as part of the assessment. The programme is designed to cover all attributes and each module may cover different areas.

Core Attributes

Engaged
Enterprising
Creative
Ethical

Key Attitudes

Commitment
Curiosity
Resilience
Confidence
Adaptability

Practical Skillsets

Digital Fluency
Organisation
Critical Thinking
Emotional Intelligence
Communication