# Glasgow School of Art Course Specification
# Course Title: Virtual Worldbuilding

Echoes of the Riad, Layla Hassani-Watson, 2025

*Please note that this course specification is correct on the date of publication but may be subject to amendment prior to the start of the Academic Year.*

| Course Code | HECOS Code | Academic Session |
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| | | **2026-27** |

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| **Course Title** | **Virtual Worldbuilding** |
| **Course Contact** | **Dr Austin Wolfe** |

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| **Credits** | **20** |
| **SCQF Level** | **11** |
| **When Taught** | **Semester 2, In person** |

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| **Associated Programmes** | **This course is available to students on all PGT programmes which include a Stage 2 elective.** |
| **Lead School** | **School of Innovation and Technology** |
| **Other Schools** | **This course is available to students on PGT programmes which include a Stage 2 elective.** |
| **Date of Approval** | **PACAAG August 2026** |

**Course Introduction**

This specific course is for students wishing to learn about creating real-time three-dimensional digital virtual environments. This course will help them to develop their knowledge, creative practice and expertise of a range of principles, techniques and tools while working on a project of their own choosing.

Virtual spaces can mimic or transcend the limits and purposes of their physical counterparts. For example, forest pathways may connect museum glades and product showcases, mind-maps can take physical form, or factory floors become play spaces for competitive games. The Course explores what it means to concept, design and implement virtual spaces, working with industry standard tools and pre-existing 3D models to create rich immersive spaces.

With a mixture of in-person, group, and asynchronous learning approaches, students will gain the necessary knowledge and skills for creating and showcasing their own virtual spaces – bringing into 3D visual and virtual existence the themes and ideas of their own choosing.

Each student will develop their own concept for a virtual 3D scene and independently create their scene in using industry standard software such as Unreal Engine. Students will create their scenes by sculpting/modelling their base landscape and then populating it with pre-existing 3D assets.

**Course Aims**

The aims of this course are:

- Introducing students to the fundamental principles of virtual world building
- Provide an overview of the software tools, practices, theory, and techniques associated with virtual worldbuilding
- Creatively explore virtual environment design

**Course Intended Learning Outcomes**

By the end of this course students will be able to:

1. Critically plan and develop a virtual world-building project, progressing from initial concept through to detailed design.
2. Evaluate, select, and apply digital skills, techniques, and industry-standard workflows to create effective and engaging virtual environments.
3. Critically reflect on and evaluate professional practice, and the application of key theories, concepts, and principles underpinning virtual world building.

**Indicative Content**

The course will cover a range of topics, including:

- Examples of virtual worlds and environments in games, entertainment, education, art, design and beyond
- The conceptualisation and design of virtual spaces
- Technical issues in the implementation of 3D virtual worlds, such as:
  - Digital materials and texturing
  - Digital environmental lighting
  - Importing pre-existing 3D models
  - 3D digital asset management and project organisation
- Introduction to Interaction and Motion in 3D virtual worlds:
  - Utilising visual scripting and interactions
  - Physics, particle systems and audio for virtual worlds
  - Animation sequencing
  - Creating animated fly-throughs

**Description of Learning and Teaching Methods**

This course is offered over 10 weeks, 2 hours a week in a PC workstation-based studio environment. The timetable will be provided in PGT Elective Handbook at start of semester 1 and will be available on Canvas.

**The principal teaching strategies employed in this practice-based course are:**
**Lectures** - used to disseminate theoretical, methodological, contextual and historical knowledge and address specific issues which can be used to underpin practical studio work.
**Demonstrations –** Demonstrations of processes and practices which students can follow along to, to help develop knowledge and understanding of practical elements of virtual world building.
**Tutorials** - designed to provide academic support through discussion of aspects of projects, opportunities for students to discuss their conceptual designs, implementation plans and practical progress with each other and with the tutor.

**Independent Learning** - Students will also be provided with written and recorded materials on Canvas and via Resource List to support independent study. Independent practice and experimentation is an important part of the learning process, under-pinned with the knowledge and understanding of professional working practices as taught in lecture based sessions.

| Indicative Contact Hours | Notional Learning Hours |
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| **20** | **200** |

| Description of Formative Assessment and Feedback Methods |
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| Students are supported in their learning through workshop and tutorial activities with staff that offer ongoing formative feedback as they progress through the course.<br>Formative feedback will be provided from staff through tutorial discussion and workshop instruction, and individual written content.<br><br>Formative feedback offers students the opportunity to present the progress of their work to staff and or peers, receiving feedback to support the development and refinement of their work towards submission for summative assessment. The purpose of this continuous formative feedback is to support students in developing and refining their project work towards submission for summative assessment |

| Description of Summative Assessment arrangements |
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| Students will undertake a project in an area aligned with their individual interests and practice, supported by tutor guidance. They are required to conceptualise, design, and develop a 3D virtual environment/world using industry-standard software.<br><br>Students must submit a portfolio of work comprising the following:<br>• Design journal detailing the development of project from initial conceptualisation, through to detailed design and development. This should include images, commentary and a short (approx. 500 word) final critical reflection.<br>• 3D environment project file<br>• Visualisation outputs (short video/beauty-shot renders)<br>• An asset list clearly differentiating third party content from student created assets. All use of 3rd party or AI generated assets must be clearly documented.<br><br>All submissions will be electronic, online submissions.<br>Due to very large file sizes, project file submissions will be via SharePoint. Journals, and links to SharePoint submission, to be submitted via Canvas.<br><br>Submissions will be assessed holistically against the course learning outcomes and moderated in line with the GSA Code of Assessment, which outlines reassessment opportunities where a student has not passed the course. |

| Description of Summative Assessment Method | Weight % | Submission week |
|---|---|---|
| Portfolio comprising of: | 100 | 11 |

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| • Design Journal detailing the development of project from initial conceptualisation, through to detailed design and development. This should include images, commentary and a short (approx. 500 word) final critical reflection.<br>• 3D environment project file<br>• Visualisation outputs (short video/beauty-shot renders)<br>• An asset list clearly differentiating third party content from student created assets. All use of 3rd party or AI generated assets must be clearly documented. | | |

| **Exchange/Study Abroad** | |
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| **Can this course be taken by Exchange/Study Abroad students?** | Yes |
| **Are all the students on the course taught wholly by distance learning?** | No |
| **Does this course represent a work placement or a year of study abroad?** | No |
| **Is this course collaborative with any other institutions?** | No |
| **If yes, then please provide the names of the other teaching institutions** | |

| **Reading and On-line Resources** |
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| The course indicative reading and online resource list is accessible via Resource Lists. |