

Glasgow School of Art Course Specification
Course Title: Advanced 3D Modelling

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 2023-24 Academic Year.

Course Code:	HECOS Code:	Academic Session:
		2023-24

1. Course Title:
Advanced 3D Modelling

2. Date of Approval:	3. Lead School:	4. Other Schools:
PACAAG August 2023	School of Innovation and Technology	This course is available to students on PGT programmes which include a Stage 2 elective.

5. Credits:	6. SCQF Level:	7. Course Leader:
20	11	Fraser Dougan

8. Associated Programmes:
This course is available to students on PGT programmes which include a Stage 2 elective.

9. When Taught:
Stage 2, Taught in studio

10. Course Aims:
<p>This is an advanced course in 3D modelling and animation, and as such only suitable for students with prior experience in 3D modelling.</p> <p>This course is offered as a cross school elective to PGT students. The overarching aims of the cross-school electives are to:</p> <ul style="list-style-type: none"> • Encourage interdisciplinary, critical reflexivity from within an open set of choices; • Foster deep investigative approaches to new or unfamiliar areas of practice and theory; • Cultivate self-directed leadership and initiative-taking in both applied and abstract modes of practice/ study not necessarily associated with a student's particular creative specialism; • Enable flexible, ethical exploration and connection of diverse knowledge and understanding within a specialist programme of study. <p>This course will provide an opportunity for students to engage in a highly self-directed 3D art/visualisation project in line with their interests or aspirations. This allows students to advance their 3D modelling and visualisation practices in line with their specialisms.</p>

11. Intended Learning Outcomes of Course:

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

- Demonstrate a critical understanding of a range of specialised principles and concepts of 3D modelling for visualisation.
- Plan and execute a visualisation project, through to the preparation of a finished 3D model, scene, or animation
- Use a range of software to support and enhance 3D modelling work, and undertake critical evaluations of the range of 3D data and models used and created
- Critically review, consolidate and extend skills in 3D modelling and composition

12. Indicative Content:

This course is for students who already have some experience working with 3D modelling applications for visualisation. The 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 focus of their own choosing.

The course will provide support to students to consolidate the following, expected skills and knowledge:

- Model detailed and efficient scenes for Animated and real time output
- Texturing and material properties for games and interactive environments (including: UV mapping, texture atlas, repeating textures)
- Photo-texturing with different 3D levels of detail
- Normal and bump mapping) for higher quality with lower level of detail
- Effective lighting and camera configuration for both still images and animated scenes
- An introduction to specialised texturing software
- 3D Digital Asset Management & Project Organisation

13. Description of Summative Assessment Methods:

Personal 3D Art/Visualisation Project

Coursework: 100%

Assessment Method	Description of Assessment Method	Weight %	Submission week (assignments)
Personal 3D Art/Visualisation Project.	Critical Reflection (1000 words) and portfolio of 3D visualisation outputs and supporting documentation	100	Week 11, Stage 2

13.1 Please describe the Summative Assessment arrangements:

Students may also choose what they do in the area of their own interest (under guidance) and as such the project is assessed as a whole (Critical Reflection and Portfolio). The critical reflection should include discussion of the context, new discovery and research.

All submissions will require:

- supporting documentation with a minimum of a 1000 word critical reflection of the project.
- Actions on feedback – Any peer or tutor feedback that influenced creative decisions or practice should be clearly noted and reflected upon.
- 3D asset files
- An asset list clearly differentiating third party content from student created assets.

Coursework: 100%

14. Description of Formative Assessment Methods:

Engagement with formative assessment is a mandatory requirement.

Individual feedback is available during online tutorials to provide formative assessment. The wide range of coursework will provide the bulk of formative and summative assessment for the full range of 3D modelling and animation skills.

14.1 Please describe the Formative Assessment arrangements:

Formative feedback will be provided regularly during online tutorials. All students will have at least one formative assessment from presentation of composed blockout with evidence of considered meaning/purpose.

15. Learning and Teaching Methods:

Formal Contact Hours	Notional Learning Hours
20	200

15.1 Description of Teaching and Learning Methods:

Timetable: 10 Weekly classes – 2 hours teaching time per week.

16. Pre-requisites:

This is an advanced course in 3D modelling and animation for 3D Visualisation, and as such only suitable for students with prior experience in 3D modelling in 3D Studio Max, Maya, Blender or Cinimar 4D. The course will be run in 3D Studio Max on PC Platform only.

17. Can this course be taken by Exchange/Study Abroad students?	Yes
18. Are all the students on the course taught wholly by distance learning?	Yes
19. Does this course represent a work placement or a year of study abroad?	No
20. Is this course collaborative with any other institutions?	No
20.1 If yes, then please enter the names of the other teaching institutions:	
N/A	

21. Additional Relevant Information:

3D computer graphics are an inherently visual medium, involving working with visual display units. As such, this course may not be suitable for registered blind or severely visually impaired students.

The course will be run in primarily in 3D Studio Max and on PC Platform only.

Students already confident with Blender can work on PC or Mac. (Mac users must bring your own device or use Blender on windows when in studio).

22. Indicative Bibliography:

To ensure up to date materials, please see the current live reading list for the elective:
<https://gsa.keylinks.org/#/list/575>

Current versions of:

- LinkedIn Learning 3Ds Max Essentials
- LinkedIn Learning Blender Essentials