

**Session: 2023/24**

Last modified: 15/02/2024

**Title of Module: 3D Asset Production 1**

<b>Code: COMP08013</b>	<b>SCQF Level: 8</b> (Scottish Credit and Qualifications Framework)	<b>Credit Points: 20</b>	<b>ECTS: 10</b> (European Credit Transfer Scheme)
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<b>School:</b>	School of Computing, Engineering and Physical Sciences
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<b>Module Co-ordinator:</b>	John McQuillan
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**Summary of Module**

This module develops 3D skills in modelling and UV unwrapping, focussing on hard surface modelling in the first half, and moving on to organic modelling in the second. Students will also develop an appreciation of the need for good topology and the relationship between topology and UV mapping for texturing.

- This module embeds the key "I am UWS" graduate attributes and in particular: Academic Universal Analytical Inquiring Work Ready Knowledgeable Digitally Literate Problem-solver Successful Autonomous Incisive Innovative Personal Universal Ethically-minded Work Ready Motivated Successful Creative Imaginative Resilient Professional Universal Collaborative Research-minded

**Module Delivery Method**

Face-To-Face	Blended	Fully Online	HybridC	HybridO	Work-based Learning
✓	✓				

**Face-To-Face**

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

**Blended**

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

**Fully Online**

Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.

**HybridC**

Online with mandatory face-to-face learning on Campus

**HybridO**

Online with optional face-to-face learning on Campus

**Work-based Learning**

Learning activities where the main location for the learning experience is in the workplace.

**Campus(es) for Module Delivery**

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
✓						

**Term(s) for Module Delivery**

(Provided viable student numbers permit).					
Term 1	✓	Term 2		Term 3	

<b>Learning Outcomes: (maximum of 5 statements)</b>		
On successful completion of this module the student will be able to:		
L1. Demonstrate an understanding of the underlying principles and terminology of 3D polygonal modelling.		
L2. Create 3D polygonal models, demonstrating an ability to create coherent topology and UV layout		
L3. Demonstrate an understanding of the relationship between topology and the final requirements of a model for texturing and/or animation		
<b>Employability Skills and Personal Development Planning (PDP) Skills</b>		
<b>SCQF Headings</b>	During completion of this module, there will be an opportunity to achieve core skills in:	
Knowledge and Understanding (K and U)	SCQF Level 8. Students will develop core skills in modelling required for employment in the 3D animation/games industry. Students will develop an understanding of the theory around flow of polygons (topology) in models and how this affects shape and function, as well as the theory underpinning UV mapping.	
Practice: Applied Knowledge and Understanding	SCQF Level 8. Students will apply the techniques discussed in lectures and lab sessions to their own modelling and solve problems in modelling for animation, Students will work with a variety of software for 3D modelling and image manipulation	
Generic Cognitive skills	SCQF Level 8. Students will identify and solve routine problems in 3D modelling, and UV unwrapping. Problems will include developing solutions in lighting and shot framing, as well as solutions to mechanical animation problems, identifying appropriate tools and using scripting to automate animation.	
Communication, ICT and Numeracy Skills	SCQF Level 8. Students will develop the numeric skills necessary to implement manipulation of polygonal mesh in 3D within a dedicated 3D application.	
Autonomy, Accountability and Working with others	SCQF Level 8. Students will engage in individual project work and in a semi-autonomous final group project. In the group project students will develop skills in managing assets required across a project by different team members.	
<b>Pre-requisites:</b>	Before undertaking this module the student should have undertaken the following:	
	<b>Module Code:</b> COMP07010	<b>Module Title:</b> Introduction to Computer Animation
	<b>Other:</b>	
<b>Co-requisites</b>	<b>Module Code:</b>	<b>Module Title:</b>

\* Indicates that module descriptor is not published.

<b>Learning and Teaching</b>	
Much use is made of video tutorial material, mostly produced 'in house', although students are directed to external online resources where suitable material exists. All assessment is practical with reflective documentation.	
<b>Learning Activities</b> During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	<b>Student Learning Hours</b> (Normally totalling 200 hours):  (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	12
Laboratory/Practical Demonstration/Workshop	36
Asynchronous Class Activity	40
Independent Study	112
	200 Hours Total
<b>**Indicative Resources: (eg. Core text, journals, internet access)</b>	
<p>The following materials form essential underpinning for the module content and ultimately for the learning outcomes:</p> <p>Getting started with Maya 20XX (current edition for software) or Other suitable reference/text book covering modelling techniques in 3D computer animation.</p> <p>VLE and lecturer produced video material and associated teaching materials.</p>	
(**N.B. Although reading lists should include current publications, students are advised (particularly for material marked with an asterisk*) to wait until the start of session for confirmation of the most up-to-date material)	
<b>Engagement Requirements</b>	
<p>In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: <a href="#">Academic engagement procedure</a></p> <p>Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: In line with the Academic Engagement and Attendance Procedure, Students are defined as academically engaged if they are regularly engaged with scheduled teaching sessions and defined points of engagement. For the purposes of this module, students are expected to demonstrate engagement through submission of all coursework and attendance at scheduled lab and lecture sessions. Students should inform the lecturer of any external circumstance requiring non-attendance. Missing any session without good reason and communication may result in removal from the module. Failure to submit coursework may also result in the removal from the module. Other areas of measure may also be used, including degree of access to University based online teaching resources.</p>	

**Supplemental Information**

<b>Programme Board</b>	Computing
<b>Assessment Results (Pass/Fail)</b>	No
<b>Subject Panel</b>	Creative Computing
<b>Moderator</b>	Mark Carey
<b>External Examiner</b>	S Kennedy-Parr

<b>Accreditation Details</b>	N/A
<b>Version Number</b>	2.10

<b>Assessment: (also refer to Assessment Outcomes Grids below)</b>
<p>Practical: consisting of two submissions of portfolio work (3D renders and models, hard surface and organic).          Written: short reflective document dealing with what the student sees as the areas they need to improve on based on both submissions (submitted with the second assessment as part of the overall portfolio of work).</p>
<p>(N.B. (i) <b>Assessment Outcomes Grids</b> for the module (one for each component) can be found below which clearly demonstrate how the learning outcomes of the module will be assessed.          (ii) An <b>indicative schedule</b> listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Handbook.)</p>

#### Assessment Outcome Grids (Footnote A.)

<b>Component 1</b>					
<b>Assessment Type (Footnote B.)</b>	<b>Learning Outcome (1)</b>	<b>Learning Outcome (2)</b>	<b>Learning Outcome (3)</b>	<b>Weighting (%) of Assessment Element</b>	<b>Timetabled Contact Hours</b>
Portfolio of practical work	✓	✓	✓	100	48
<b>Combined Total For All Components</b>				100%	48 hours

#### Footnotes

A. Referred to within Assessment Section above

B. Identified in the Learning Outcome Section above

<p>Note(s):</p> <ol style="list-style-type: none"> <li>1. More than one assessment method can be used to assess individual learning outcomes.</li> <li>2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).              This will normally be variable across Schools, dependent on Programmes &amp;/or Professional requirements.</li> </ol>
<p><b>Equality and Diversity</b></p> <p>The University policies on equality and diversity will apply to this module: the content and assessment are based on the ability to communicate in English but are otherwise culture-neutral.              This module is almost entirely computer based and students must be proficient computer users within a graphical user interface.              It should be noted that this module makes extensive use of video material for teaching, students undertaking the module will need to be able to follow, and work with the video tutorials.</p> <p><a href="#">UWS Equality and Diversity Policy</a></p> <p>(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)</p>