



MODULE SPECIFICATION

Part 1: Information			
Module Title	3D Technologies for the Web		
Module Code	UFCFS3-30-2	Level	Level 5
For implementation from	2018-19		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Contributes towards			
Module type:	Standard		
Pre-requisites	Multimedia Studio 2018-19		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: Pre-requisites: students must take UFCFY5-30-1 Multimedia Studio</p> <p>Educational Aims: See Learning Outcomes.</p> <p>Outline Syllabus: Historical and emerging 3D open-source web technologies e.g. VRML, X3D, Web GL, current and emerging proprietary technologies e.g. Wire Fusion, Unity 3D, Shockwave 3D, Papervision.</p> <p>3D web technologies and related scenarios: marketing and product evaluation, casual gaming, interactive environments for learning, virtual tours and exhibitions, training simulations, 3D social networking e.g. Sony PlayStation Home, literal and abstract representations.</p> <p>3D components and related concepts: lights, cameras, simple geometry, materials, texture maps, level of detail, object hierarchies, animation, integrated physics and particle systems, world and local coordinate systems, component transformations, audio systems, spatial sound, optimization techniques, common and alternative input devices.</p>

STUDENT AND ACADEMIC SERVICES

First and third-person camera implementations, camera occlusion and related concepts. 3D character preparation, optimization and integration.

Use and application of 3D Modelling tools for the generation of multimedia content and associated development scenarios. Importing and optimisation of 3d content.

Design and code scripts for a given 3D development technology. Testing and debugging, deployment considerations for a target device. Utilisation of external data sources. User interface considerations and application of common design principles.

Project organisation, resource acquisition and optimisation, version control, common file formats, copyright considerations.

Teaching and Learning Methods: Students will learn through a combination of lectures and practical activities in a computer laboratory. Students will be expected to learn independently and carrying out reading and directed study beyond that available within taught classes.

Students will be expected to continue to develop their personal UWE student website portfolio to include examples of 3D media-driven web pages. This will serve as a framework to explore and consolidate their skills and understanding of contemporary 3D web technologies and associated software applications.

Contact time: 72 hours

Assimilation and development of knowledge: 148 hours

Exam preparation: 20 hours

Coursework preparation: 60 hours

Total study time: 300 hours

Part 3: Assessment

Students will be expected to carry out several small development activities using an appropriate 3D technology. This will contribute to their portfolio assessment component. Each activity will be awarded a mark for its completion and web deployment where appropriate.

The assignment for this module will be designed to consolidate the students' knowledge and practical skills in relation to the learning outcomes and to provide independent learning and problem solving.

Assessment criteria will be established against learning outcomes and objectives provided in the assignment specifications.

End examination of three hours duration.

First Sit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B		53 %	Assignment with supporting documentation
Online Assignment - Component B		22 %	Website portfolio with supporting documentation
Examination - Component A	✓	25 %	Exam (3 hours)
Resit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B		75 %	Assignment with supporting documentation
Examination - Component A	✓	25 %	Exam (3 hours)

Part 4: Teaching and Learning Methods		
Learning Outcomes	On successful completion of this module students will be able to:	
	Module Learning Outcomes	
	MO1	Identify, create and deploy a range of interactive 3D web technologies and discuss their use in an appropriate context
	MO2	Use a range of 3D web technologies and related toolsets applicable within the context of 3D content development
	MO3	Appreciate the creative and technical processes involved in the development of 3D web technologies
	MO4	Design, implement test and deploy interactive 3D web technologies to a given specification
	MO5	Transfer 3D content to a remote server and test / debug on appropriate end-user devices
	MO6	Compare and critical evaluate software and related hardware associated with 3D web technologies
	MO7	Consider the significance and likely impact of new and emerging interactive 3D technologies
Contact Hours	Contact Hours	
	Independent Study Hours:	
	Independent study/self-guided study	228
	Total Independent Study Hours:	228
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	72
	Total Scheduled Learning and Teaching Hours:	72
	Hours to be allocated	300
	Allocated Hours	300
Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/modules/ufcfs3-30-2.html</p>	