University of Brighton

MODULE SPECIFICATION TEMPLATE

MODULE DETAILS													
Module title	Introduction to 3D Modelling and Animation												
Module code	CI474												
Credit value	20												
Level Mark the box to the right of the appropriate level with an 'X'	Level 4	x	Level 5		Level 6		Level 7		Level 8				
	Level 0 (for modules at foundation level)												
Entry criteria for registration on this module													
Pre-requisites Specify in terms of module codes or equivalent													
Co-requisite modules Specify in terms of module codes or equivalent													
Module delivery													
Mode of delivery	Taught	X	Distance		Placement		Online						
	Other												
Pattern of delivery	Weekly	x	Block		Other								
When module is delivered	Semester 1		Semester 2		Throughout year	x							
	Other												
Brief description of module content and/ or aims Overview (max 80 words)	This module will provide an introduction to the foundations of 3D computer graphics and basic animation. Covering the fundamentals of basic 3D design, modelling, texturing, simple lighting and animation, students will on completion be able to create simple 3D animated rendered sequences for multi format delivery.												
Module team/ author/ coordinator(s)	Jon McClellan												
School	Computing, Engineering and Mathematics												
Site/ campus where delivered	Moulsecoomb												
Course(s) for which module is appropriate and status on that course													

Course	**Status (mandatory/ compulsory/ optional)**
BSc (Hons) Digital Games Development	Compulsory
BSc (Hons) Computer Science for Games	Compulsory

MODULE AIMS, ASSESSMENT AND SUPPORT	
Aims	This module aims to allow students to develop core skills in the planning and creation of 3D models.
Learning outcomes	On successful completion of this module the student will be able to: 1. Plan and storyboard for animation pipelines 2. Use modelling and rendering software to create 3D assets for export to external systems 3. Create basic 3D animated sequences using industry standard software.

	4. Understand key legal, ethical and professional issues within modelling and animation.

Content	Production planning, storyboard and concept art creation and use. Modelling objects and backgrounds using primitives. Building basic environments: objects, lights and cameras. Object hierarchies and their uses. Creating and modifying meshes and splines. Creating and modifying revolved and lofted objects. Shader materials and texture maps. Basic keyframe animation. 3d camera animation. Rendering. Legal, ethical and professional issues within animation. Production planning and time management.
Learning support	**Indicative Reading:** Latest versions of the following: Derakshani, D, *Introducing Autodesk Maya*. Focal Press. Ingrassia, M. *Maya for Games*. Focal Press. Nass, P. *Maya Essentials*. Official Autodesk Press. McKinley, M. *The Game Animators Guide to Maya*. Wiley Glebas, F. *Directing the Story: Professional Storytelling and Storyboarding Techniques for Live Action and Animation*. Focal Press Hart, J. *The Art of the Storyboard*. Focal Press **Software** Industry standard software will be used for modelling and animation asset creation. **Online Resources** Web links will be provided on student central during module delivery, these will include links to relevant on-line tutorials such as those available at Lynda.com

Teaching and learning activities	
Details of teaching and learning activities	**Face to face learning**: This will take the form of a combination of weekly lectures and lab based tutorials. Online Learning: All study materials will be made available on Student Central. All student work will be submitted electronically and students will be provided with e-feedback. Feedback including marks will be provided through Student Central, Grade Centre. **Formative assessment**: As part of their guided independent study and lab/tutorial exercises, working from their production plan (Portfolio task 1), students will begin to create a 3D scene for the animated sequence. Feedback will take the form of verbal and written comments from both the module team and peer review.

Allocation of study hours (indicative) Where 10 credits = 100 learning hours		**Study hours**
SCHEDULED	This is an indication of the number of hours students can expect to spend in scheduled teaching activities including lectures, seminars, tutorials, project supervision, demonstrations, practical classes and workshops, supervised time in workshops/ studios, fieldwork, and external visits.	48
GUIDED INDEPENDENT STUDY	All students are expected to undertake guided independent study which includes wider reading/ practice, follow-up work, the completion of assessment tasks, and revisions.	152

PLACEMENT	The placement is a specific type of learning away from the University. It includes work-based learning and study that occurs overseas.	
	TOTAL STUDY HOURS	**200**

Assessment tasks	
Details of assessment on this module	**Portfolio task 1**: Production plan for animation project (LO1) (30%) As part of their guided independent study and lab/tutorial exercises, students will complete a production plan for animated sequence. The task will require the submission of the Storyboard, Concept Art and a short reflective report (approximately 1,000 words). **Portfolio task 2:** Finished 3D animated scene. (LO 2,3, 4) (70%). As part of their guided independent study and lab/tutorial exercises, students will complete a short animated sequence. The task will require the submission of the finished 3D scene with associated files, rendered animated sequence and a short reflective report of (approximately 2,000 words).

Types of assessment task[1] Indicative list of summative assessment tasks which lead to the award of credit or which are required for progression.		**% weighting** (or indicate if component is pass/fail)
WRITTEN	Written exam	
COURSEWORK	Written assignment/ essay, report, dissertation, portfolio, project output, *set exercise*	100%
PRACTICAL	Oral assessment and presentation, practical skills assessment, *set exercise*	

EXAMINATION INFORMATION	
Area examination board	Computing

Refer to University for guidance in completing the following sections

External examiners			
Name	**Position and institution**	**Date appointed**	**Date tenure ends**
Silvester Czanner	Liverpool John Moores University	1 October 2019	30 September 2023

QUALITY ASSURANCE	
Date of first approval Only complete where this is <u>not</u> the first version	CDR April 2018
Date of last revision Only complete where this is <u>not</u> the first version	Editorial change Oct 2018, January 2020

[1] Set exercises, which assess the application of knowledge or analytical, problem-solving or evaluative skills, are included under the type of assessment most appropriate to the particular task.

Date of approval for this version	Editorial June 20			
Version number	2.1			
Modules replaced Specify codes of modules for which this is a replacement	CI174			
Available as free-standing module?	Yes		No	X