

1.1 Module 2: 2D Art, Design and Animation

1.1.1 Headline information about the module

Module title	2D Art, Design and Animation
Module NFQ level (only if an NFQ level can be demonstrated)	6
Module number / reference	CT002
Parent programme(s) the plural arises if there are embedded programmes to be validated	BA (Hons) in Creative Technologies and Digital Art Certificate in Creative Technologies and Digital Art
Stage of parent programme	1
Semester (semester1/semester2 if applicable)	Semester 1
Module credit units (FET/HET/ECTS)	ECTS
Module credit number of units	5
List the teaching and learning modes	Full-Time, Direct Contact / Blended
Entry requirements (statement of knowledge, skill and competence)	Learners must have achieved the programme entry requirements
Pre-requisite module titles	N/A
Co-requisite module titles	N/A
Is this a capstone module? (Yes/no)	No
Specification of the qualifications (academic, pedagogical and professional/occupational) and experience required of staff (staff includes workplace personnel who are responsible for learners such as apprentices, trainees and learners in clinical placements)	Lecturing staff must be qualified to minimum NFQ Level 9 in animation or games, or related discipline, or hold an equivalent professional qualification. Experience in the games or animation industry would be desirable. Ideally, they would also hold a third level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).
Maximum number of learners per centre (or instance of the module)	25
Duration of the module	12 weeks
Average (over the duration of the module) of the contact hours per week	4
Module-specific physical resources and support required per centre (or instance of the module)	<ul style="list-style-type: none"> • Computer lab with capacity for 25 learners equipped with a projector • Access to Adobe Animate and Photoshop • Graphics tablets • Unity 3D.

Analysis of required learning effort		
*Effort while in contact with staff	Minimum ratio teacher / learner	Hours
Classroom and demonstrations	1:25	48
Monitoring and small-group teaching	-	-
Other (specify)	-	-
Independent Learning		
Directed e-learning (hours)		-
Independent learning (hours)		25
Assignment		52
Work-based learning hours of learning effort		-
Total Effort (hours)		125

Allocation of marks (within the module)					
	Continuous assessment	Supervised project	Proctored practical examination	Proctored written examination	Total
Percentage contribution	100%	-	-	-	100%

1.1.2 Module aims and objectives

The aim of this module is to familiarise the learner with the fundamental principles of animation, and the ways in which they may be applied to 2D animation. The module focuses on the practical engagement of which the goal is to develop skills that the learner requires to use industry-standard animation software.

1.1.3 Minimum intended module learning outcomes

On successful completion of this module, the learners are able to:

- (i) navigate and interact with industry-standard 2D animation software and programs and utilise this software to articulate their individual artistic vision;
- (ii) bring an initial concept to realisation, thereby demonstrating an ability to create 2D animation for export into a game engine;
- (iii) demonstrate realism in animation;
- (iv) demonstrate both a working knowledge of keyframes and the importance of setting up strong frames in creating fluid animation.

1.1.4 Rationale for inclusion of the module in the programme and its contribution to the overall MIPLOs

The basic principles of 2D animation are the foundations on which more sophisticated artistic and technical skills are built. An understanding of these core principles, and an ability to then put them into practice, underpins all further learning undertaken on this programme. The minimum intended module learning outcomes relate to programme learning outcomes (i) and (vi).

1.1.5 Information provided to learners about the module

Learners are provided with number of sources of information about this module, such as the induction session which presents learners with an overview of the modules. The induction session touches upon key areas of study such as the module aims, expectations and supports available. At the

commencement of each module, the learner is provided with a detailed overview of the module, the assessment strategy and schedule. The learner is then issued assignment briefs that fall in line with the deliverables outlined in the module objectives / outcomes.

The Learner Handbook, included with this submission, demonstrates how the learning in this module fits in to the overall structure of the programme. The handbook contains detailed module descriptors including teaching, learning and assessment strategies. Learners are provided with access to a learner Google account and to Google Classroom. Here, information regarding module descriptors, programme timetables and assessment information is uploaded. Google Classroom is for use by both learners and staff for the presentation of class notes and content as well as a point for assignments to be issued and submitted to.

1.1.6 Module content, organisation and structure

This module focuses on the following topics:

Introduction to animation basics (50%)

- 12 principles of animation
- Observation of squash and stretch as applied to 2D animation
- Introduction to frame-by-frame animation
- Introduction to Sprite sheet concepts and similarity to traditional 2D animation
- Understanding frame rates and the effects thereof
- Designing characters for animation emphasis
- Conveying attitude and character through poses and animation

Introduction to 2D animation software (50%)

- Basic menu set-up for animation in unity
- Camera and scene set-up
- Keyframes and timeline
- Tweened / Dope Sheet animation
- Sprite sheet animation
- Frame-by-frame animation in Photoshop
- Photoshop timeline
- Frame delay
- Layers.

1.1.7 Module teaching and learning (including formative assessment) strategy

The module is taught by way of a combination of lectures and practical demonstrations. Learners are then be tasked with applying the techniques and tools demonstrated by the lecturer in the course of short practical assignments.

Activity	Teaching / Learning Strategy	Learning Environment
Lectures and demonstrations (48 hours)	Formal lectures and demonstrations on the fundamentals of animation and an introduction to the principles of 2D animation software	College
Independent work (25 hours)	Self-directed work	College / Home
Assignment (52 hours)	Continuous assessment based on a number of short assignments set at the end of class each week	College /Home

1.1.8 Work-based learning and practice-placement

There is no work-based learning or practice-placement within this module.

1.1.9 E-Learning

Google Classroom acts as a reference point for the learner where all relevant information regarding the module is compiled. It also provides the learner with a messaging service between classmates and staff. Any changes or updates to module content is reflected on the platform along with a notification of change / messaging service. Google Classroom also accommodates for the submission of larger file types, a common feature of this programme. Learners also have access to additional academic material and supports through the Moodle virtual learning environment (VLE).

1.1.10 Module physical resource requirements

The module requires a computer lab with capacity for 25 learners equipped with a projector, access to Adobe Animate and Photoshop, Unity 3D, and graphics tablets.

1.1.11 Reading lists and other information resources

Primary reading

Thomas, F. and Johnston, O. (1995). *The illusion of life: Disney animation*. New York: Hyperion.

Secondary reading

Blair, P. (2019) *Cartooning: Animation 1 with Preston Blair: Learn to animate step by step (How to Draw and Paint)*, reprint edition. Mission Viejo, CA: Walter Foster Publishing.

William, R. (2012) *The Animator's Survival Kit: A Manual of Methods, Principles and Formulas for Classical, Computer, Games, Stop Motion and Internet Animators*, 4th/revised Edition. London: Farrar, Straus and Giroux.

Online resources

Ross, Tony (2016) *Animating 2D Characters: Harmony to Unity* LinkedIn.

Freeman, Jesse (2016) *2D Game Design and Development. Essential Training* LinkedIn.

Freeman, Jesse (2017) *Learning Unity 2D Sprites* LinkedIn.

1.1.12 Specifications for module staffing requirements

For each instance of the module, one lecturer must be qualified to at least master's level (NFQ Level 9) in animation or games, or related discipline, or hold an equivalent professional qualification. Experience in the games or animation industry would be desirable.

Ideally, they would also hold a third level teaching qualification (e.g. the Griffith College Certificate in Education, Learning and Development).

1.1.13 Module summative assessment strategy

Learners are continuously assessed based on a number of short assignments set at the end of class each week. Such assignments may include:

- creating short animations using primitives
- walk cycle
- idle cycle
- bone rigging in Unity
- bringing sprite sheets (bitmap image files) into Unity
- making sprite sheets for characters.