## University of the West of Scotland

## Module Descriptor

#### Session: 2024/25

Title of Module: Intro to Games Development							
Code: COMP07028	SCQF Level: 7 (Scottish Credit and Qualifications Framework)	Credit Points: 20	ECTS: 10 (European Credit Transfer Scheme)				
School:	School of Computi Sciences	School of Computing, Engineering and Physical Sciences					
Module Co-ordinator:	Thomas Hainey	Thomas Hainey					

## Summary of Module

This is a core first year module for the undergraduate degree programme in Computer Games Development and an optional module for the Computer Animation Arts programme. This module will introduce various aspects associated with the construction of computer games including rudimentary terminology, production of games design documents, psychology of play and motivation for players playing computer games, what makes a good game, game mechanics, computer games history from the 1940's to the present, games design, story narrative, testing and games development lifecycle models. The students will work on their own or in a group of two, supported by tutorials, developing design documents for game ideas of their own choice.

The students will develop a games design document utilising a template and a small game implementation using a game development environment. The module will focus on Game Maker Studio and Unreal allowing them to experience and see aspects of programming via blueprints and scripting as well as game flow and balance to allow production of a small show reel of their work that will allow a playthrough, critical reflection and descriptive commentary to boost their Porfolio and bolster their understanding of producing evidence for future modules. The module will develop soft skills such as presentation skills, critical reflection and problem-solving skills as well as visualisation of programming principles. The module will adhere to the UWS Curriculum framework and TIGA accreditation by being student centric utilising industry standard tools and pedagogies for the diverse group of students and the two cohorts.

- This module embeds the key "I am UWS" graduate attributes and in particular: Universal(Critical Thinking, Analytical, Inquiry), Work Ready(Digitally Literate, Problem-solver), Successful(Creative, Imaginative).
- The module will be flexible and hybrid where class activities will be a combination of remote, on-campus, recorded and live interactive sessions utilising the innovative VLE of UWS.
- The module will recognise the diversity of the student body in both cohorts and provide adaptive and permutational assessments to support the learning of individual students by allowing them to pursue their interests.

• Authentic assessment will be integrated by the encapsulation of soft skills and allow students to present their game ideas for peer review.

Module Delivery Method									
Blended	Fully Online	HybridC	Hybrid 0	Work-Based Learning					
	-	Blondod Fully	Blandad Fully HybridC	Blandad Fully Hybrid Hybrid					

See Guidance Note for details.

Campus(e	Campus(es) for Module Delivery									
The module will <b>normally</b> be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit) (tick as appropriate)										
Paisley: Ayr: Dumfries: Lanarkshire: London: Distance/Online Other:										
$\boxtimes$						Add name				

Term(s) for Module Delivery								
(Provided viable student numbers permit).								
Term 1   Image: Marcolar matrix   Term 2   Image: Term 3   Image: Im								

These appro	Learning Outcomes: (maximum of 5 statements) These should take cognisance of the SCQF level descriptors and be at the appropriate level for the module. At the end of this module the student will be able to:							
L1	L1 Create a games design document							
L2	Create a game or level using a Games Engine							
L3	Present the game in a show reel with critical and descriptive commentary or a playthrough and submit it for peer assessment							
L4	Demonstrate a basic knowledge of the History of Computer Games							
Emplo	Employability Skills and Personal Development Planning (PDP) Skills							
SCQF	<b>SCQF Headings</b> During completion of this module, there will be an opportunity to achieve core skills in:							

Knowledge and Understanding (K	SCQF Level 7				
and U)	development from ic includes computer of Psychology of play, and testing. There	ng of the issues relating to computer games lea, through design to product. This also games history, computer games design, game mechanics, development lifecycles will be a class related activity series on story from the 1940's to the present.			
Practice: Applied Knowledge and	SCQF Level 7				
Understanding	Produce a games design document and implement a small prototype game or level in a game engine selected after appropriately following a number of tutorials.				
Generic Cognitive skills	SCQF Level 7				
	Integrate ideas form class activities and VLE materials presented to create a good game in terms of level design, character design, genre, game objects, game mechanics and the utilisation of a games-development lifecycle				
Communication, ICT and Numeracy	SCQF Level 7				
Skills	Take part in	) using shared document editing software. demonstrating/presenting a game(s) scriptive show reel for portfolio.			
Autonomy, Accountability and	SCQF Level 7				
Working with others	Attend meetings Demonstrate co Playtesting. Demonstrate historical	eate, discuss, develop, and select game ideas. with tutor at agreed times. mpleted game(s) to peers. knowledge of Computer Games by completing s that will contribute to overall grade(s).			
Pre-requisites:	Before undertaking the undertaken the follow	nis module the student should have ving:			
	Module Code:	Module Title:			
	Other:				
Co-requisites	Module Code:	Module Title:			

\*Indicates that module descriptor is not published.

### Learning and Teaching

There will be a scheduled class activity time for one hour per week which will be recorded to cater for synchronous and asynchronous delivery and adhere to the UWS Curriculum Framework of being flexible and hybrid. During these classes the students will be presented with a range of material: a discussion on a current games-related topic, slides on knowledge related to an area of games development, and general discussions on how the class is progressing. In practice this class tends to be continued in corridor, coffee-bar and lecturer-room informal conversations in order to create an early ambiance with new students and to get them thinking more widely round this broad subject when on-campus circumstances permit. There has also been a small interactive class test implemented in AULA to test Historical aspects of video games based on student feedback.

There will then be a practical lab which will introduce learners to various games engines and implementation activities for the implementation of their coursework and to introduce them to the technologies.

Students will complete a games design document, prototype a level or game in Game Maker or Unreal which will then be presented to peers. There will also be interactive quizzes on the History of Computer Games that will incrementally, continuously and iteratively and interactively assessed.

In line with current learning and teaching principles, a 20-credit module includes 200 learning hours, normally including a minimum of 36 contact hours and maximum of 48 contact hours.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	Student Learning Hours (Normally totalling 200 hours): (Note: Learning hours include both contact hours and hours spent on other learning activities)
Lecture/Core Content Delivery	24
Laboratory/Practical Demonstration/Workshop	24
Independent Study	152
	200 Hours Total

\*\*Indicative Resources: (eg. Core text, journals, internet access)

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Hill-Whittall, R. (2015). The Indie Game Developer Handbook Paperback – Illustrated.

Students will require access to computing facilities and software suitable for the practical tasks (a scripted game development package, an online shared document editing package.) These will most likely be Game Maker 8.1 Lite and Unreal Engine which are freely downloadable. Students will also require access to Unity which will be available on campus and is freely downloadable for learners.

Hill-Whittall, R. (2015). The Indie Game Developer Handbook Paperback – Illustrated.

(\*\*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)

#### **Attendance and Engagement Requirements**

In line with the <u>Student Attendance and Engagement Procedure</u>: Students are academically engaged if they are regularly attending and participating in timetabled on-campus and online teaching sessions, asynchronous online learning activities, course-related learning resources, and complete assessments and submit these on time.

For the purposes of this module, academic engagement equates to the following: Students are expected to access videos and other class materials through the VLE, complete tutorial exercises and lab exercise and meet submission deadlines, failure to do so will be regarded as an indicator of disengagement with the module. Disengagement from the module is defined as not having interacted within a 4 week period. If this happens then contact will be attempted for conversation about circumstances.

## Equality and Diversity

The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: <u>UWS Equality, Diversity and Human Rights Code.</u>

This module is suitable for any student. The assessment regime will be applied flexibly so that a student who can attain the practical outcomes of the module will not be disadvantaged. When a student discloses a disability, or if a tutor is concerned about a student, the tutor in consultation with the School Enabling Support co-ordinator will agree the appropriate adjustments to be made. The module will adhere to the 5th core principle of the Curriculum Framework by recognising the diversity of the student body and the requirement to be accessible to all i.e. a combination of remote and on-campus in the ethos of hybrid delivery.

(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)

#### **Supplemental Information**

Divisional Programme Board	Computing
Assessment Results (Pass/Fail)	Yes □No ⊠
School Assessment Board	Creative Computing
Moderator	Dr Gavin Baxter
External Examiner	N. Whitton

Accreditation Details	TIGA Accreditation
Changes/Version Number	2.12

Assessment: (also refer to Assessment Outcomes Grids below)

The assessment for the module will consist of the following:

-A written creative assessment where students will produce a games design document which is worth 40%.

-A creative implementation utilising a games engine to create a small prototype game and a showreel worth 50%.

-A class test on the History of Computer Games worth 10%.

Assessment 1 – Creation of design document for a game.

Assessment 2 – Creation and demonstration of a game implementation. Complete a show reel presentation of a game idea or a live one.

Assessment 3 – Class test on the History of Computer Games.

(N.B. (i) **Assessment Outcomes Grids** 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 **indicative schedule** listing approximate times within the academic calendar when assessment is likely to feature will be provided within the Student Module Handbook.)

# Assessment Outcome Grids (See Guidance Note)

Component 1								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
	$\checkmark$					40	0	

Component 2								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	•	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
		$\checkmark$	$\checkmark$			50		

Component 3								
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
				$\checkmark$		10		
	Combined Total for All Components						XX hours	

# Change Control:

What	When	Who
Further guidance on aggregate regulation and application when completing template	16/01/2020	H McLean
Updated contact hours	14/09/21	H McLean
Updated Student Attendance and Engagement Procedure	19/10/2023	C Winter
Updated UWS Equality, Diversity and Human Rights Code	19/10/2023	C Winter
Guidance Note 23-24 provided	12/12/23	D Taylor
General housekeeping to text across sections.	12/12/23	D Taylor

Version Number: MD Template 1 (2023-24)