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 Computing, Engineering and Physical Sciences				
Module Co-ordinator:	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 s	skills
	and allow students to present their game ideas for peer review.	

Module	dule Delivery Method											
Face-Tace		Bler	ided		Fully Online	Hy	bridC	_	brid 0			Based ning
\boxtimes												
See Gui	ee Guidance Note for details.											
Campus	s(es)	for Mod	lule De	live	ry							
	e/Onli				ered on t ded viab					s / or by rmit) (tick	as	3
Paisley:	Ау	r:	Dumfri	ies:	Lanarks	shire:	Londor	า. เ	Dista Learr	nce/Onlir ning:	ne	Other:
\boxtimes												Add name
Term(s)	for N	/lodule	Deliver	у								
(Provide	ed vial	ole stud	ent num	nber	s permit)							
Term 1		\boxtimes		Teri	m 2				Term	3		
These s	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:							the				
L1 C	Create	a game	es desiç	gn de	ocument							
L2 C	reate	a game	or leve	el usi	ing a Ga	mes E	Engine					
Present the game in a show reel with critical and descriptive commentary or a playthrough and submit it for peer assessment												
L4 D	L4 Demonstrate a basic knowledge of the History of Computer Games											
Employ	abilit	y Skills	and Pe	erso	nal Deve	elopn	nent Pla	anni	ng (P	DP) Skil	ls	
SCQF H	During completion of this module, there will be an opportunity to achieve core skills in:						ortunity to					

Co-requisites	Module Code:	Module Title:			
	Other:				
	Module Code: Module Title:				
Pre-requisites:	Before undertaking this module the student should have undertaken the following:				
Autonomy, Accountability and Working with others	SCQF Level 7 Work with others to create, discuss, develop, and select game ideas. Attend meetings with tutor at agreed times. Demonstrate completed game(s) to peers. Playtesting. Demonstrate historical knowledge of Computer Games by completing small interactive quizzes that will contribute to overall grade(s).				
Communication, ICT and Numeracy Skills	Take part in) using shared document editing software. demonstrating/presenting a game(s) scriptive show reel for portfolio.			
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				
Practice: Applied Knowledge and Understanding	prototype game or	lesign document and implement a small level in a game engine selected after g a number of tutorials.			
Knowledge and Understanding (K and U)	SCQF Level 7 A broad understanding of the issues relating to computer games development from idea, through design to product. This also includes computer games history, computer games design, Psychology of play, game mechanics, development lifecycles and testing. There will be a class related activity series on Computer Games History from the 1940's to the present.				

^{*}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</u>, <u>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	Component 1							
Assessme nt Type (Footnote B.)	Learning Outcome (1)		Learning Outcome (3)	Outcome	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
	✓					40	0	

Component	Component 2							
Assessme nt Type (Footnote B.)	Learning Outcome (1)	Outcome	Learning Outcome (3)	Outcome	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetable d Contact Hours	
		✓	√			50		

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

Change Control:

What	When	Who
Further guidance on aggregate regulation and application	16/01/2020	H McLean
when completing template		
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
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Version Number: MD Template 1 (2023-24)