Module Descriptor

Title	Intro to Games Development		
Session	2025/26	**Status**	Published
Code	COMP07028	**SCQF Level**	7
Credit Points	20	**ECTS (European Credit Transfer Scheme)**	10
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	Dr. 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	**On-Campus[1]** ☒	**Hybrid[2]** ☐	**Online[3]** ☐	**Work -Based Learning[4]** ☐
Campuses for Module Delivery	☐ Ayr ☐ Dumfries	☐ Lanarkshire ☐ London ☒ Paisley	☐ Online / Distance Learning ☐ Other (specify)	

Terms for Module Delivery	Term 1	☒	Term 2	☐	Term 3	☐
Long-thin Delivery over more than one Term	Term 1 – Term 2	☐	Term 2 – Term 3	☐	Term 3 – Term 1	☐

Learning Outcomes	
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
L5	

Employability Skills and Personal Development Planning (PDP) Skills	
SCQF Headings	**During completion of this module, there will be an opportunity to achieve core skills in:**
Knowledge and Understanding (K and U)	**SCQF 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

[1] Where contact hours are synchronous/ live and take place fully on campus. Campus-based learning is focused on providing an interactive learning experience supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus contact hours will be clearly articulated to students.

[2] The module includes a combination of synchronous/ live on-campus and online learning events. These will be supported by a range of digitally-enabled asynchronous learning opportunities including learning materials, resources, and opportunities provided via the virtual learning environment. On-campus and online contact hours will be clearly articulated to students.

[3] Where all learning is solely delivered by web-based or internet-based technologies and the participants can engage in all learning activities through these means. All required contact hours will be clearly articulated to students.

[4] Learning activities where the main location for the learning experience is in the workplace. All required contact hours, whether online or on campus, will be clearly articulated to students

Practice: Applied Knowledge and Understanding	**SCQF 7** 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 7** 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 Skills	**SCQF 7** Create a document(s) using shared document editing software. Take part in demonstrating/presenting a game(s) Produce a reflective/descriptive show reel for portfolio.
Autonomy, Accountability and Working with Others	**SCQF 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).

Prerequisites	**Module Code**	**Module Title**
	Other	
Co-requisites	**Module Code**	**Module Title**

Learning and Teaching
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. 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.

Learning Activities During completion of this module, the learning activities undertaken to achieve the module learning outcomes are stated below:	**Student Learning 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	150
Please select	
Please select	
Please select	
TOTAL	200

Indicative Resources
The following materials form essential underpinning for the module content and ultimately for the learning outcomes: 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 Student Attendance and Engagement Procedure, 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:** The School of Computing, Engineering and Physical Sciences considers attendance and engagement to mean a commitment to attending, and engaging in, timetabled sessions. You will scan your attendance via the scanners each time you are on-campus and you will login to the VLE several times per week. Where you are unable to attend a timetabled learning session due to illness or other circumstance, you should notify the Programme Leader that you cannot attend. Across the School an 80% attendance threshold is set. If you fall below this, you will be referred to the Student Success Team to see how we can best support your studies.

Equality and Diversity
The University's Equality, Diversity and Human Rights Procedure can be accessed at the following link: UWS Equality, Diversity and Human Rights Code. Lab based (contact = 48) Aligned with the University's commitment to equality and diversity, this module supports equality of opportunity for students from all backgrounds and learning needs. Using the VLE, material will be presented electronically in formats that allow flexible access and manipulation of content. This module complies with University regulations and guidance on inclusive learning and teaching practice. This module has lab-based teaching and as such you are advised to speak to the Module Co-ordinator to ensure that specialist assistive equipment, support provision and adjustment to assessment practice can be put in place, in accordance with the University's policies and regulations.
(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**
Overall Assessment Results	☐ **Pass / Fail** ☒ **Graded**
Module Eligible for Compensation	☐ **Yes** ☒ **No** **If this module is eligible for compensation, there may be cases where compensation is not permitted due to programme accreditation requirements. Please check the associated programme specification for details.**
School Assessment Board	Creative Computing
Moderator	Gavin Baxter
External Examiner	Prof Sylvester Arnab
Accreditation Details	TIGA
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	2.13

Assessment (also refer to Assessment Outcomes Grids below)
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.)

Component 1							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Portfolio	☒	☐	☐	☐	☐	40	

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Portfolio	☐	☒	☒	☐	☐	50	

Component 3							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Class Test/Quiz	☐	☐	☐	☒	☐	10	
Combined total for all components						100%	hours

Change Control

What	**When**	**Who**
Updated enagament and Euqality and Diversity Regulations	24/03/2025	Thomas Hainey