Title of Module: Computer Games Design			
Code: COMP08035	SCQF Level: 8 (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:	Gavin Baxter		
Summary of Module			

The module adopts a team-based approach that involves documenting the development of a game idea via a GDD. Working in their project teams, students will propose their idea via their GDD providing relevant justifications and design decisions. The project teams will then pitch their game idea by giving a presentation to sell its feasibility and potential merits. The aim of the presentation is to provide the project teams with a real-life scenario where they are pitching their idea to a game publisher. During the module students will learn about various topics associated with game design including game design frameworks, the games development lifecycle, game, and technical design documents. Relevant soft skills of teamwork, communication and project planning are accentuated in this module.

Through the use of Aula the module is student-centred promoting a sense of community through feedback and discussion related to topics associated with games design. The module supports flexible and hybrid delivery through the use of synchronous and asynchronous online delivery allowing students to work at their own pace and in their own time. On-campus drop in sessions are also provided for students requiring face-to-face (F2F) support, feedback and guidance. Industry authentic is adhered to with students working together in project teams to produce, document and showcase a game idea. Inclusivity is addressed through making course material available via multiple channels (e.g., Aula, Microsoft Teams), recording of class sessions with subtitles, the creation of a student Discord group, promoting a community spirit for the module on Aula.

- The module will provide students with a comprehensive overview and firm understanding of the various phases associated with the games development life cycle (GDLC).

- The module will inform students about the relevancy of formulating robust and comprehensible games design documents (GDD). The

relevancy of GDDs within the context of the games development life cycle will be accentuated to the students.

- The different roles within a games development team and their interrelationship with one another in the context of the games industry will be explored. The employability skills, such as communication and team work, deemed highly relevant in the games industry are accentuated in the module.

- The importance of quality assurance (QA) in addition to testing approaches and software development methodologies will be reviewed.

- The module facilitates and supports students towards enhancing their employability skills allowing them to work collaboratively in their project roles towards critically thinking about planning, developing and pitching their game ideas.

- Throughout the duration of the module students will enhance their team working and communication skills with a view to identifying which ones to improve upon whilst working in their project teams.

- This module embeds the key "I am UWS" graduate attributes and in particular: Universal(Critical Thinker, Analytical, Culturally aware, Collaborative), Work Ready(effective communicator, motivated) and Successful (Driven, Transformational).

Module Delivery Method

Fully Online	HybridC	HybridO	Work-based Learning
	✓		

Fully Online
Instruction that is solely delivered by web-based or internet-based technologies. This term is used to describe the previously used terms distance learning and e learning.
HybridC
Online with mandatory face-to-face learning on Campus
HybridO
Online with optional face-to-face learning on Campus
Work-based Learning
Learning activities where the main location for the learning experience is in the workplace.

Campus(es) for Module Delivery

The module will **normally** be offered on the following campuses / or by Distance/Online Learning: (Provided viable student numbers permit)

Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
✓						

Term(s) for Module Delivery

(Provided viable student numbers permit).

Term 1		Term 2		Term 3	
	✓				

Learning Outcomes: (maximum of 5 statements)

On successful completion of this module the student will be able to:
L1. Create, develop and maintain a games design document adhering to sound game industry processes and standards.
L2. Obtain a firm comprehension of the dynamics of a games development team and its role within the games industry.
L3. Work in a team context to produce a game idea via a design document and pitch a game idea.
L4. Present a game idea and articulate, justify and sell the merits, development feasibility and overall appeal of the proposed game.

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 Level 8. Demonstrate a broad understanding of game design concepts and issues. Provide a critical understanding of gameplay, mechanics, narrative, level design, immersion, balance, flow and other fundamentals of game design. Demonstrate a broad understanding of industry standard processes and techniques used in game design regarding documentation and implementation.
Practice: Applied Knowledge and Understanding	SCQF Level 8. Demonstrate knowledge of fundamental concepts of game design to produce original conceptual and detailed designs of a computer game. Produce a detailed Game Design Document (GDD) which

	complies with recognised industry practice and standards. Demonstrate creativity and innovation with a proposed game idea by orally communicating this via a pitch to peers.
Generic Cognitive skills	SCQF Level 8. Demonstrate enhanced communication skills and self-efficacy by presenting a game concept and justifying its merits to a panel. Show assimilation and detailed knowledge of game design theory and practice by producing a detailed game design Document and pitching a game idea.
Communication, ICT and Numeracy Skills	SCQF Level 8. Create and maintain a cloud computing space to facilitate the online sharing of resources among team members for project management and version control purpose (e.g., project documentation). Use appropriate social media technologies to support and facilitate project communication, management and dissemination. Discuss the overall project idea, its progress and development within a presentation and a Game Design Document.
Autonomy, Accountability and Working with others	SCQF Level 8. Develop ownership of a game design concept within a project team environment. Use self-directed learning to augment the materials provided during the class sessions. Work in a project team to develop a game concept, a detailed game design document, a presentation of a feasible game idea. Take responsibility for your own work in addition to that of the team from a project management perspective.

Pre-requisites:	Before undertaking this module the student should have undertaken the following:	
	Module Code: COMP07028	**Module Title:** Intro to Games Development
	Other:	Or any 20 credit module at SCQF level 7 which includes a substantial element of aesthetic and/or technical design.
Co-requisites	**Module Code:**	**Module Title:**

* Indicates that module descriptor is not published.

Learning and Teaching

The module utilises a blend of flexible and hybrid learning approaches that involve and support both online synchronous and asynchronous delivery. Class sessions are delivered online in real time in addition to them being recorded with accompanying subtitles for students to view in their own time on the module's Aula site and the module's Microsoft Teams Channel.

All materials used during class-based sessions are available on the module's Aula site and on Microsoft Teams module channel. Synchronous online class sessions present the relevant underpinning of games design theory which is supplemented by class discussions, directed reading and the use of social media resources such as YouTube videos depicting aspects of games design and the games industry in general. The module adheres to a flexible, hybrid delivery where class sessions are recorded with accompanying subtitles in real time offering students with an asynchronous approach to their learning. The asynchronous component of the recorded sessions allows students to access and view the course material on multiple devices (e.g., smartphone, tablet, laptop). On-campus drop-in sessions are also provided during the module to provide face-to-face (F2F) support for students to receive support and feedback in relation to their coursework.

Students will learn relevant game design concepts pertaining to be of relevance towards employability in the games industry. The importance of understanding the dynamics of a game's development team within the context of the game's development life cycle will underpin the ethos of the module's focus. This core aspect of the module will be supported and facilitated via a project-based learning and social constructivist approach with the students learning from one another within their project teams.

Through sharing their knowledge with one another in the project teams online it is intended that the students will enhance their own meta-cognitive skill sets throughout the duration of their project (e.g., project planning, communication, teamwork) and develop their own levels of self-efficacy (e.g., when presenting and pitching their game idea).

Students will be expected to communicate and virtually coordinate in their project teams using various communication platforms such as Microsoft Teams, Discord or Unity Collaborate.

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	12
Tutorial/Synchronous Support Activity	12
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:
The core text book for the module is: Adams, A. (2013). Fundamentals of Game Design. (3rd ed.) New Riders.

The following books are useful supplementary reading materials for the module:
Adams, A. and Dormans, J. (2013). Game Mechanics: Advanced Game Design (Voices that Matter). New Riders.

Elias, G.S., Garfield, R., Gutschera, K.R., Whitley, P. and Zimmerman, E. (2012). Characteristics of Games. MIT Press.

Isbister, K. (2016). How Games Move Us: Emotion by Design. MIT Press.

Keith, C. (2010). Agile Game Development with SCRUM. Addison Wesley.

Kremers, R. (2010). Level Design: Concept, Theory & Practice. A K Peters/CRC Press.

Macklin, C. (2016). Games, Design and Play: A Detailed Approach Towards Iterative Game Design. Addison Wesley.

Menard, M. (2014). Game Development with Unity. (2nd ed.). Cengage Learning PTR.

Pan, M. and Felinto, D. (2013). Game Development with Blender. Cengage Learning PTR.

Schell, J. (2019). The Art of Game Design: A Book of Lenses. (3rd ed.) A K Peters/CRC Press.

Tavakkoli, A. (2015). Game Development and Simulation with Unreal Technology. A K Peters/CRC Press.

(**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)

Engagement Requirements
In line with the Academic Engagement Procedure, Students are defined as academically engaged if they are regularly engaged with timetabled teaching sessions, course-related learning resources including those in the Library and on the relevant learning platform, and complete assessments and submit these on time. Please refer to the Academic Engagement Procedure at the following link: Academic engagement procedure Where a module has Professional, Statutory or Regulatory Body requirements these will be listed here: Students are expected to access lecture materials and other class materials (e.g., videos) through the University's VLE and Microsoft Teams and complete the coursework and meet submission deadlines. Support is provided throughout the module both online and on-campus to students who might be struggling with their coursework. Disengagement from the module is defined as not having interacted within a 4-week period. If this happens then contact will be attempted with the student for conversation about circumstances.

Supplemental Information

Programme Board	Computing
Assessment Results (Pass/Fail)	No
Subject Panel	Creative Computing
Moderator	Dr. Thomas Hainey
External Examiner	N Whitton
Accreditation Details	This module is accredited by BCS as part of a number of specified programmes. This module is also TIGA accredited.
Changes/Version Number	2.13 Graduate attributes added. No more changes made. Learning and teaching approach modified to reflect UWS Curriculum Framework 2025. Leaning outcomes 3 and 4 altered to coincide with changes made to module assessment components.

Assessment: (also refer to Assessment Outcomes Grids below)

Games Design Document (40%)
Review/Article/Critique/Paper (20%), Presentation (40%)
(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 Handbook.)

Assessment Outcome Grids (Footnote A.)

Component 1

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Design/ Diagram/ Drawing/ Photograph/ Sketch	✓	✓	✓		40	0

Component 2

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Review/ Article/ Critique/ Paper	✓	✓	✓		20	0
Presentation			✓	✓	40	1
Combined Total For All Components					100%	1 hours

Footnotes
A. Referred to within Assessment Section above
B. Identified in the Learning Outcome Section above

Note(s): 1. More than one assessment method can be used to assess individual learning outcomes.

2. Schools are responsible for determining student contact hours. Please refer to University Policy on contact hours (extract contained within section 10 of the Module Descriptor guidance note).
This will normally be variable across Schools, dependent on Programmes &/or Professional requirements.

Equality and Diversity
This module is appropriate for any student. 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. UWS Equality and Diversity Policy
(N.B. Every effort will be made by the University to accommodate any equality and diversity issues brought to the attention of the School)