University of the West of Scotland

Module Descriptor

Session: 2024/25

Title of Module: Level Design			
Code: COMP08092	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:	Dr Gavin Baxter		

Summary of Module
The primary focus of this module concentrates upon the theory and practice of level design in the domain of games development. The core concepts, fundamentals, and considerations in the context of level design will be studied including but not limited to, level design hierarchies, structure, foundations of design including use of game space, architecture, spatial types, scale and awareness, environmental design, and lighting.   Working in small project teams, students will be required to apply the theory of level design learnt on the module towards implementing playable game levels or walk through environment. Project planning and control is utilised via the GitHub platform. In addition, project teams are required to undertake the important process of playtesting and document how this has been addressed with regards to the development of their level.   This module adopts a student-centred community driven approach via informal discussions about level design on-campus during the lectures. The lectures and labs for the module are run on-campus. Students are also provided with a range of level design topics to discuss online with their peers. Students can access and download relevant course material to learn at their own pace and within their own time.   • Provide a broad yet in-depth overview of the function of level design within the context of the game's development life-cycle.   • Distinguish and inform the co-dependent and interrelated nature of level design and making students culturally aware of this in the context of level design.   • Review and assesses the job role of a level designer and the meta-skills required by the games industry for the position.   • Support students in their abilities to work autonomously and collaboratively in their project roles towards critically thinking about planning and developing their creative outputs.

- Identify and articulate the required employability skill sets required as a level designer such as critical, analytical problem-solving, team working and communication skills.

- Provide scope to utilise industry standard games engine platforms (e.g., Unity or Unreal Engine) required for working in the games industry to create innovative playable levels or environments.

- 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					
Face-To-Face	**Blended**	**Fully Online**	**HybridC**	**Hybrid 0**	**Work-Based Learning**
☒	☐	☐	☐	☐	☐
See Guidance Note for details.					

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) (tick as appropriate)						
Paisley:	Ayr:	Dumfries:	Lanarkshire:	London:	Distance/Online Learning:	Other:
☒	☐	☐	☐	☐	☐	Add name

Term(s) for Module Delivery					
(Provided viable student numbers permit).					
Term 1	☐	Term 2	☒	Term 3	☐

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	Demonstrate an understanding of the principles and theory behind successful level design for engaging game levels that present appropriate challenges to players.
L2	Use a commercial game engine platform to create a game levels or an stand alone environment that include relevant elements of game play and mechanics.

L3	Analyse game environments and levels for navigation of gameplay and explain how the analysis relates to the theories and principles of level design.
L4	Undertake playtesting of developed levels or environment and document the results analysing user feedback.

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 by way of documentation and development a critical understanding and awareness of the principal theories, concepts and principles associated with level design.
Practice: Applied Knowledge and Understanding	SCQF Level **8** Understand the importance of planning, designing, and conceptualising the layout of a level or environment in the documentation stage of development.
Generic Cognitive skills	SCQF Level **8** Offer professional level insights, interpretations, and solutions for successful level design in response to current challenges and problems for level design.
Communication, ICT and Numeracy Skills	SCQF Level **8** Use relevant game engine software such as Unity or Unreal Engine to support and enhance the development of a level or game environment. Utilise version control, project management and online communication platforms work at this level and use this to aid project planning and communication with peers in a project team environment. Click or tap here to enter text.
Autonomy, Accountability and Working with others	SCQF Level **8** Exercise autonomy and initiative in professional activities. Practise in ways which show a clear awareness of own and others' roles and project responsibilities.
Pre-requisites:	Before undertaking this module the student should have undertaken the following:
	Module Code: COMP07028	**Module Title: Intro to Games development**
	Other:	
Co-requisites	**Module Code:**	**Module Title:**

*Indicates that module descriptor is not published.

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.	
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	10
Laboratory/Practical Demonstration/Workshop	38
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 textbook for the module is: Totten, C.W. (2014). An Architectural Approach To Level Design. A K Peters/CRC Press. The following books are useful supplementary reading materials for the module: Adams, A. (2013). Fundamentals of Game Design. (3rd ed.) New Riders. Bernhaupt, R. (2016). Game User Experience Evaluation. Springer. Calleja, G. (2011). In-Game: Immersion to Incorporation. MIT Press. Isbister, K. (2016). How Games Move Us: Emotion by Design. MIT Press. Kremers, R. (2010). Level Design: Concept, Theory & Practice. A K Peters/CRC Press. Macklin, C. (2016). Game, Design and Play: A Detailed Approach to Iterative Game Design. Addison Wesley. Pears, M. (2020). Let's design: Combat. Joshua Maxwell Pears. Salmond, M. (2021). Video Game Level Design: How to Create Video Games with Emotion, Interaction, and Engagement. Bloomsbury Academic. Totten, C.W. (2016). Level Design: Processes and Experiences. A K Peters/CRC

Press.

Totten, C.W. (2019, 2nd Edition). An Architectural Approach to Level Design. 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)

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:

Students are expected to access lecture materials and other class materials (e.g., videos) through the University's VLE and complete the coursework and meet submission deadlines. Support will be provided to students who are encountering problems in accessing course materials and in engaging 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.

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.

Please ensure any specific requirements are detailed in this section. Module Co-ordinators should consider the accessibility of their module for groups with protected characteristics..

(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 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	1.07

Assessment: (also refer to Assessment Outcomes Grids below)
Assessment 1 – Level Design Document (40%)
Assessment 2 – Development of Level(s)/Game/Environment and evaluation (60%)
(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

Assessment Type (Footnote B.)	Learning Outcome (1)	Learning Outcome (2)	Learning Outcome (3)	Learning Outcome (4)	Learning Outcome (5)	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)	Learning Outcome (5)	Weighting (%) of Assessment Element	Timetabled Contact Hours
Creative output/ Audiotapes / Videotapes / Games/ Simulations	✓	✓	✓	✓		60	1

Combined Total for All Components	**100%**	**1 hours**