

Session: 2022/23

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| 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: | Gavin Baxter | | |
| Summary of Module | | | |
| <p>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.</p> <p>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.</p> <p>This module adopts a student-centred community driven approach via informal discussions about level design on Aula. Students are provided with a range of level design topics to discuss online with their peers. Class sessions are run synchronously online using Microsoft Teams and are recorded with transcriptions provided to address student accessibility and inclusivity. The module accommodates a hybrid flexible approach towards its delivery also providing students with face-to-face (F2F) support via on-campus drop in support sessions. Physical and digital accessibility is adhered to in the module with access to the module's material via Aula and Microsoft Teams. Students can access and download relevant course material to learn at their own pace and within their own time.</p> <ul style="list-style-type: none">• Provide a broad yet in-depth overview of the function of level design within the context of the games 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 | HybridO | Work-based Learning |
|--------------|---------|--------------|---------|---------|---------------------|
| | ✓ | | | | |

Face-To-Face

Term used to describe the traditional classroom environment where the students and the lecturer meet synchronously in the same room for the whole provision.

Blended

A mode of delivery of a module or a programme that involves online and face-to-face delivery of learning, teaching and assessment activities, student support and feedback. A programme may be considered "blended" if it includes a combination of face-to-face, online and blended modules. If an online programme has any compulsory face-to-face and campus elements it must be described as blended with clearly articulated delivery information to manage student expectations

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. 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

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| 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. | |
| 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: <u>Intro to Games Development</u> |
| | Other: | |
| Co-requisites | Module Code: | Module Title: |

* Indicates that module descriptor is not published.

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| Learning and Teaching | |
| <p>The module delivery adopts a predominately flexible and hybrid delivery learning approach via online and on-campus experience drop in support sessions. Online class sessions will be delivered synchronously online but recorded with subtitles to provide pedagogical flexibility with asynchronous learning. Students can access course material via multiple devices (i.e., tablet, smartphone, laptop) in their own time via Aula and the module Teams Channel to accommodate their own format and pace of learning. The module utilises the learning experience platform, Aula, to disseminate relevant course material and announcements. The use of social media tools is incorporated into the curriculum delivery at certain stages (e.g. YouTube - videos for illustrative purposes on level design, topical online discussions on the subject). From the student perspective, project teams will predominantly interact online (e.g., using Microsoft Teams, Discord, Zoom, Unity Collaborate) via project-based learning allowing students to constructively share their knowledge and skill sets with their peers throughout the duration of their project.</p> | |
| 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) |

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| | activities) |
| Lecture/Core Content Delivery | 10 |
| Tutorial/Synchronous Support Activity | 18 |
| Laboratory/Practical Demonstration/Workshop | 20 |
| 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: 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)

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 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.

Supplemental Information

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| 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. |
| Version Number | 1.06 |

Assessment: (also refer to Assessment Outcomes Grids below)

Written assessment 40%

Practical coursework 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 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 | |

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| Creative output/ Audiotapes/ Videotapes/ Games/ Simulations | ✓ | ✓ | ✓ | ✓ | 60 | 0 | |
| Combined Total For All Components | | | | | 100% | 0 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

In order for the student to complete this module the use of level design packages (e.g. Game Engines such as: Unreal Engine, Unity) will be required.
[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)