Module Descriptor

Title	Computer Games Honours Project		
Session	2025/26	**Status**	Published
Code	COMP10079	**SCQF Level**	10
Credit Points	40	**ECTS (European Credit Transfer Scheme)**	20
School	**Computing, Engineering and Physical Sciences**		
Module Co-ordinator	Dr Gavin Baxter		

Summary of Module

This project module will allow a student to undertake an extensive individual project in an investigative development project within their area of interest and chosen specialism. If a student specifies that their next ambition is to enter a Masters level programme then the project can be more investigative in nature in terms of identifying research methodologies, performing systematic literature reviews, a smaller part of development and then some form of evaluative research to formulate conclusions. If this is the case, then the project will be research based and be up to 60% research. If a student specifies that they are wishing to increase their developmental/implementation skill set then the project will be primarily design, implementation and testing where the project will be up to 60% implementation. The module will allow a student to select a research-based project or a development-based project.

The module is delivered via a series of on-campus lectures and tutorials designed to guide the students through their Honours dissertations.

• Implementation of a Computer Game at various levels of complexity depending on project type.

• Investigation and identification of software development lifecycle/games development methodologies.

• Investigation, identification, and Performance of a Software Games testing methodology.

• Production of an Evaluation Plan utilising a suitable Evaluation methodology.

• Perform an extensive qualitative or quantitative evaluation of a Computer Game if the project is research based.

• Perform a smaller scale qualitative or quantitative evaluation of a Computer Game if the project is development based and produce a show reel of developed work.

This module embeds the key "I am UWS" graduate attributes and in particular: Universal (critical thinker, analytical, inquiring), Work Ready (knowledgeable, digitally-literate, problem-solver) and Successful (creative, imaginative, innovative, autonomous).

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	Produce a plan for a defined career path either in research or development or in some form of hybrid capacity to better prepare for the next level of advancement whether that is further study or entry into the software or games industry. Produce and obtain agreement to a project specification describing the work that will be done in investigating or developing a game in a chosen topic relevant to Computer Games Development interests.
L2	Write a detailed and critical review of the relevant literature to the topic area outlining issues, gaps, theoretical, developmental considerations, and existing research. Produce a Games Design Document, Technical Design Document, Game Software Testing Plan and Log and an Evaluation with the appropriate analysis of results utilising statistical techniques.
L3	Demonstrate an ability to critically select and apply appropriate research methodologies, software development lifecycle methodologies development techniques in producing a solution to a practical computer game related problem or area.
L4	Critically and reflectively plan, execute, and present a computing games project to develop an artefact that is fit for purpose i.e. an industry standard prototype suitable for showcasing and portfolio inclusion.
L5	Demonstrate orally via a presentation an overview of a chosen dissertation subject area along with a developed game to be viewed by an informed audience.

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:**

[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

Knowledge and Understanding (K and U)	**SCQF 10** Demonstrate an understanding of the nature of investigative research on a games related subject and illustrate the appropriate selection of development, testing and evaluation techniques towards the development of the students' game.
Practice: Applied Knowledge and Understanding	**SCQF 10** Display the ability to undertake and individually coordinate a games development project focusing on the design and implementation of a research related topic.
Generic Cognitive skills	**SCQF 10** Logically plan and execute a substantial piece of development work whilst providing evidence related to all aspects of the games development life-cycle.
Communication, ICT and Numeracy Skills	**SCQF 10** Develop and enhance written communication and presentation skills in addition to development skills incorporating aspects of the games design process.
Autonomy, Accountability and Working with Others	**SCQF 10** Demonstrate the ability to work autonomously to work towards project deliverables and deadlines in terms of creating a game and simultaneously writing the project dissertation.

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.	
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	20
Tutorial / Synchronous Support Activity	60
Independent Study	300
Personal Development Plan	20
Please select	
Please select	
TOTAL	400

Indicative Resources

The following materials form essential underpinning for the module content and ultimately for the learning outcomes:

Adams, E. (2014) Fundamentals of Game Design. (3rd Edition). New Riders.

Creswell, J.W. (2014) Research Design: Qualitative, Quantitative and Mixed Methods Approaches. (4th Edition). Sage.

Greetham, B. (2009) How to Write Your undergraduate Dissertation. Palgrave Study Skills.

Hainey, T. and Baxter, G. (2022) Writing Successful Undergraduate Dissertations in Games Development and Computer Science. Routledge.

Macklin, C. and Sharp, J. (2016) Games, Design and Play: A Detailed Approach To Iterative Game Design. Addison-Wesley.

McMillan, K. and Weyers, J. (2011) How to Write Dissertations and Project Reports. Pearson.
Schell, J. (2015) The Art of Game Design: A Book of Lenses. 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:

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.

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	Professor Sylvester Arnab
Moderator	Dr Thomas Hainey
External Examiner	Professor Sylvester Arnab
Accreditation Details	TIGA
Module Appears in CPD catalogue	☐ **Yes** ☒ **No**
Changes / Version Number	Version 1

Assessment (also refer to Assessment Outcomes Grids below)
Assessment 1
Assessment 1 – Research and development (80%)
Assessment 2
Assessment 2 – Oral Presentation of dissertation and game (20%)
Assessment 3
(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**
Dissertation/ Project report/ Thesis	☒	☒	☒	☒	☒	80	4

Component 2							
Assessment Type	**LO1**	**LO2**	**LO3**	**LO4**	**LO5**	**Weighting of Assessment Element (%)**	**Timetabled Contact Hours**
Presentation	☒	☒	☒	☒	☒	20	2

Component 3

Assessment Type	LO1	LO2	LO3	LO4	LO5	Weighting of Assessment Element (%)	Timetabled Contact Hours
	☐	☐	☐	☐	☐		
Combined total for all components						100%	hours

Change Control

What	When	Who