ROBERT GORDON UNIVERSITY ABERDEEN

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MODULE DESCRIPTOR

Module Title

Games Development

Reference	CM4114	Version	2
Created	December 2020	SCQF Level	SCQF 10
Approved	August 2017	SCQF Points	15
Amended	March 2021	ECTS Points	7.5

Aims of Module

To provide the student with the knowledge and skills needed to build interactive games using a modern game development framework, while developing an understanding of player expectations, the playtesting of video games, and the accessibility requirements of modern entertainment titles.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

1	Use the facilities available in a suitable game development framework to develop interactive gaming experiences.
2	Design, code and implement 2D or 3D gaming interfaces, making use of appropriate modern technologies for scene and game logic representation.
3	Employ game deployment techniques to create a distributable file for multiple platforms.
4	Design, implement and test a video game against user expectations.
5	Demonstrate a critical understanding of accessibility issues with respect to the game design and development.

Indicative Module Content

Overview of 3D representation of game objects, scenes, cameras, physics, textures and materials, sound, game logic, persistence, multi-platform deployment, game interface design, animation, game design, accessibility.

Module Delivery

Key concepts and ideas are introduced in lectures. In the lab sessions, the students will develop and implement practical aspects of game development in a modern development environment. The labs will involve use of existing IDE and GUI tools for the development, deployment and testing of game applications.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	34	N/A
Non-Contact Hours	116	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5

Description:	This is a coursework which involves the design, development and testing of a game-based solution.

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighting of C1. An overall minimum grade of D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1.
B	The student needs to achieve a B in C1.
C	The student needs to achieve a C in C1.
D	The student needs to achieve a D in C1.
E	The student needs to achieve an E in C1.
F	The student needs to achieve an F in C1.
NS	Non-submission of work by published deadline or non-attendance for examination

Module Requirements

Prerequisites for Module	The student should have previous experience of using an object oriented programming language and/or appropriate graphical design module.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

1	Borromeo, N., 2020. Hands-On Unity 2020 Game Development. Packt Publishing.
2	Ferrone, H., 2020. Learning C# By Developing Games With Unity 2020 - Fifth Edition. Packt Publishing; 5th Revised edition
3	Doran, J., 2020. Unity 2020 Mobile Game Development - Second Edition. [S.l.]: Packt Publishing.
4	Felicia, P., 2019. Unity From Zero To Proficiency (Foundations). Independently published.
5	Gilbert, R., 2019. INCLUSIVE DESIGN FOR A DIGITAL WORLD. 1st ed. Apress; 1st ed. edition.