STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Information			
Module Title	Introduction to Creative Coding		
Module Code	UFCF8L-30-1	Level	Level 4
For implementation from	2019-20		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Educational Aims: This module will enable students to develop key creative and technical skills.

Outline Syllabus: Indicative areas of study will include:

Introduction to creative computer programming
Creative applications programming environments, differences between languages like
Java/Javascript (Processing) and C/C++ (OpenFrameworks/Cinder)
Basic drawing functions
Introduction to animation
Data types/ iteration (for and while)/ selection (if and switch) /functions

Introduction to object-oriented programming using particle systems
Classes, objects, and data-encapsulation
Algorithmic particle generation and control
Introduction to creating Graphical User Interfaces
Audio generation fundamentals
Audio Reactivity
Introduction to Creating with Data
Introduction to embedded creative computing

1

Teaching and Learning Methods: Developing software using open source and freely available frameworks, students will develop creative practices such as visual design, animation and basic interactivity. This will be balanced with the technical practices that enable them to produce these creative outputs. These skills lie at the core of the industries that graduates will work within.

Part 3: Assessment

The assessment strategy in this module is based upon the module information covered in lectures, seminars, tutorial sessions and student's self-directed research.

Summative Assessment: Projects are evaluated on subject specific criteria clearly stated on each project brief at the outset of each project. Students will submit: A presentation on a generative drawing method or research approach from a prescribed list. (Component A)

A 2D generative drawing program that creates graphics based on code-driven drawing techniques (Component B1)

A functional, reactive algorithmic audio-visual application working in 2D or 3D and linking with sound generation (Component B2)

Formative Assessment: A mix of individual, peer-to-peer and group tutorials will be provided.

Feedback: Feedback will be given oral and written feedback through discussions in class, tutorials, written feedback on assignments and comments on students' research blogs.

Plagiarism: All submissions will checked using the university plagiarism software

First Sit Components	Final Assessment	Element weighting	Description
Project - Component B		30 %	Generative drawing project
Project - Component B		45 %	Creative audio-visual application project
Presentation - Component A	✓	25 %	Formal presentation (15 minutes)
Resit Components	Final Assessment	Element weighting	Description
Project - Component B		30 %	Generative drawing project
Project - Component B		45 %	Creative audi-visual appliction project
Presentation - Component A	✓	25 %	Video presentation (about 15 minutes)

Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Understand the foundations of creative programming, discuss uses of both C++ and java based programming environments within the creative applications context	MO1
Research contemporary digital artworks and online resources to aid creative and technical development	MO2
Develop small-scale reactive audio-visual programs that apply understanding of the foundations of both technical and creative approaches	MO3
Understand and use the basic programming constructs and Isolate and fix common errors in custom programs.	MO4
Manipulate various datatypes, such as arrays, strings, and pointers.	MO5
Apply object-oriented approaches to creative software problems	MO6

Contact Hours

Independent Study Hours:

Independent study/self-guided study	204
Total Independent Study Hours:	204

Scheduled Learning and Teaching Hours:

Face-to-face learning	96
Total Scheduled Learning and Teaching Hours:	96
Hours to be allocated	300
Allocated Hours	300

Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ufcf8l-30-1.html

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Multimedia Technology [Oct][FT][GCET][4yrs] - Not Running BSc (Hons) 2017-18

Digital Media {Foundation}[Sep][SW][Frenchay][5yrs] BSc (Hons) 2018-19

Digital Media {Foundation}[Sep][FT][Frenchay][4yrs] BSc (Hons) 2018-19