STUDENT AND ACADEMIC SERVICES

UWE Bristol | University of the West of England

MODULE SPECIFICATION

Part 1: Information	

Module Title	Software Development for Audio		
Module Code	UFCF94-15-3	Level	Level 6
For implementation from	2018-19		
UWE Credit Rating	15	ECTS Credit Rating	7.5
Faculty	Faculty of Environment & Technology	Field	Computer Science and Creative Technologies
Department	FET Dept of Computer Sci & Creative Tech		
Contributes towards			
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description

Educational Aims: See Learning Outcomes.

Outline Syllabus: Object oriented design and programming.
Advanced audio data processing (e.g. frequency domain techniques, large processing structures, audio file formats).
Large program design, structure and implementation styles.
Efficiency, optimisation, profiling, structural techniques, error handling, defensive programming, source management, issue tracking.

Teaching and Learning Methods: Theoretical and conceptual aspects of the module will be introduced by lecture on a weekly basis and, where appropriate, contextualised with practical demonstrations of application. Relevant reading material and sections from the course text should be read in preparation for each lecture.

Learners will apply the conceptual elements of taught material in weekly practical sessions where abilities in problem solving and implementation surrounding audio technology concepts will be

developed. Learners are required to complete exercises, extend ideas, and develop further understanding independently of the timetabled sessions.

The assignment will require students to complete additional unsupervised learning. It should be anticipated that the majority of the associated study time will be biased towards the assignment deadlines.

Contact time: 36 hours
Assimilation and development of knowledge: 74 hours
Exam preparation: 10 hours
Coursework preparation: 30 hours
Total study time: 150 hours

Part 3: Assessment

The presentation will be used to establish learners' understanding of the module content as described in lectures and reading materials.

The assignment will be used to assess learners' practical skills in the application of music and audio technology systems. This will involve demonstrating an ability to create an extended piece of work beyond the examples seen in lectures and practicals.

Formative assessment will be provided as part of the practical sessions. Individual feedback will be provided on the assignment and presentation.

Assessment criteria will be supplied with the assignment specification and in example exam papers.

First Sit Components	**Final Assessment**	**Element weighting**	**Description**
Practical Skills Assessment - Component B	✓	75 %	Assignment 1 (individual work)
Presentation - Component A		25 %	Presentation (15 minutes)
Resit Components	**Final Assessment**	**Element weighting**	**Description**
Practical Skills Assessment - Component B	✓	75 %	Assignment 1 (individual work)
Presentation - Component A		25 %	Presentation

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Part 4: Teaching and Learning Methods	
Learning Outcomes	On successful completion of this module students will be able to:

	Module Learning Outcomes
MO1	Interpret, formulate and implement object oriented software designs and programs as solutions to music and audio related problems
MO2	Create, evaluate and select libraries, data structures, classes and algorithms appropriate for the development of audio and music applications
MO3	Demonstrate effective operation of a range of development tools relevant to the development of software to a professional standard
MO4	Classify, evaluate and communicate software design concepts relevant to audio and music applications

Contact Hours	**Contact Hours**	
	Independent Study Hours:	
	Independent study/self-guided study	114
	Total Independent Study Hours:	114
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	36
	Total Scheduled Learning and Teaching Hours:	36
	Hours to be allocated	150
	Allocated Hours	150

Reading List	*The reading list for this module can be accessed via the following link:* https://uwe.rl.talis.com/modules/ufcf94-15-3.html