STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Information			
Module Title	Systems Analysis and Databases		
Module Code	UFCFQE-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: See Learning Outcomes

Outline Syllabus: Techniques for conducting systems investigation, e.g. interviews, observation, questionnaires, document gathering…etc.

The current methodologies available for analysing and designing systems, e.g. Prototyping, DSDM, RAD.

UML modelling.

Advantages and disadvantages of a case tool.

Problems of traditional file based approaches to data access.

Database terminology and normalization technique.

DBMS as a layer between the user and the data.

Facilities of a DBMS, SQL, DML and DDL.

The 3-layer SPARC model for DBMS.

Physical, logical and external schemas.

Implement and test external schemas for a relational database

Teaching and Learning Methods: 300 hours study time of which 108 hours will represent scheduled learning.

Scheduled learning will typically include lectures, seminars, supervision and an interactive forum.

All students are expected to attend a series of tutorials.

Introductory lectures (25%) are supported by seminars, case studies, visits (15%) and practical workshops (60%). In addition this module will be supported by interactive forums and learning tools.

192 hours research, independent study and preparation for assessment work: Independent learning includes hours engaged with reading, assignment preparation and completion. Student study time will be organised each week with a series of both essential and further readings and preparation for practical workshops.

Part 3: Assessment

A range of assessment techniques will be employed to ensure that learners can meet the breadth of learning outcomes presented in this module alongside the ability to demonstrate transferable skills e.g. communication skills.

Examination: To demonstrate an understanding of the underlying concepts of systems analysis and their application to real-world development situations.

Time-constrained assessment: Analysis of a business problem and design of a solution. Students must produce a model for the proposed system based on their data requirements.

Implementation, Testing and Evaluation of a database solution The task will include implementation, testing and evaluation of a database solution. Students will produce the database and suitable accompanying documentation e.g. user guide.

Opportunities for formative assessment exist for the assessment strategy used. Verbal feedback is given and all students will engage with personalised tutorials setting SMART targets as part of the programme design.

First Sit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	✓	60 %	Implementation, Testing and Evaluation of a Database Solution
In-class test - Component A		24 %	Time-constrained assessment (2.5 hours) in-class
Examination - Component A		16 %	Examination (1.5 hours)
Resit Components	Final Assessment	Element weighting	Description
Set Exercise - Component B	✓	60 %	Implementation, Testing and Evaluation of a Database Solution FINAL ASSESSMENT
Set Exercise - Component A		24 %	Time-constrained assessment (2.5 hours)
Examination - Component A		16 %	Examination (1.5 hours)

Part 4: Teaching and Learning Methods	3

Learning Outcomes	On successful completion of this module students will achieve the following learning outcomes:

Module Learning Outcomes	Reference
Explain the evolution and development of current system lifecycle models	MO1
Demonstrate the use of a range of techniques to analyse a business concern	MO2
Apply and justify an appropriate methodology to construct a solution to an identified problem	MO3
Implement and test the solution	MO4
Understand the evolution of databases, their advantages and limitations	MO5
Comprehend the importance of the 3-layer SPARC model for the database management system	MO6
Design a logical schema for a relational database that meets the needs of a business requirement	MO7
Implement and test the solution	MO8

Contact Hours	**Independent Study Hours:**	
	Independent study/self-guided study	192
	Total Independent Study Hours:	192
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	108
	Total Scheduled Learning and Teaching Hours:	108
	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/index.html	

Part 5: Contributes Towards

This module contributes towards the following programmes of study:

Applied Computing [Sep][FT][UCW][2yrs] FdSc 2019-20

Applied Computing [Sep][PT][UCW][3yrs] FdSc 2019-20