



MODULE SPECIFICATION

Part 1: Information			
Module Title	Creating with Data		
Module Code	UFCF9L-30-2	Level	Level 5
For implementation from	2018-19		
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		
Contributes towards			
Module type:	Standard		
Pre-requisites	Information Technology 2018-19, Introduction to Web Platforms 2018-19		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Overview: The explosive growth of social media on the web, and other large data sets, combined with the digitisation of cultural artefacts by libraries and museums opens up exciting new possibilities for creating with data. This module examines the emerging area of work concerned with the collection, preparation, analysis, visualisation, management, and preservation of large collections of information. As designers and researchers it is now possible to easily access huge bodies of cultural and scientific data from both the past and the present.</p> <p>Pre-requisites: Students must take one of Information Technology (UFCFR3-30-1) or Introduction to Web Platform (UFCFS5-30-1).</p> <p>Educational Aims: This module explores the possibilities, methods, and tools for working with large data sets, with a particular focus on data analysis and creative transformation and visualisation of data. During this module students will contextualise their practice through a consideration of relevant work from digital art and design, media theory and HCI.</p>

STUDENT AND ACADEMIC SERVICES

Outline Syllabus: Within the module students will explore cultural, social and technical developments that place "information" and "data" in the centre of contemporary social and economic life (the concepts of information society, network society, software society). The module will enable the critical examination of the fundamental paradigms developed by modern societies to analyse patterns in data - statistics, visualisation and data mining. As such, the ethics of big data analysis are also addressed.

Teaching and Learning Methods: The reflexive use of computational tools will be encouraged with students using these tools to better understand how they are used in society at large - the modes of thinking they enable, their strengths and weaknesses, and the often unexamined assumptions behind their use.

Part 3: Assessment

Students will develop analytical and creative data-based projects that are informed by the range of topics that are explored throughout the course. This will be divided into two coursework projects (B1, B2), and an oral presentation about one of the projects (A). Through these assessments students will develop an understanding of the concept of data, as well as of a related set of conceptual and theoretical issues.

Coursework project (B1/B2): Assesses quality, originality, and conceptual grounding of the code and the concept. Both coursework projects require the student to gather and process data, using web standards and relational databases. Information is gathered ethically and the creative output is based on good design practice.

Presentation (A): Held in examination period of semester 2.

Feedback: will be given through discussions in class, group tutorials, written feedback for assignments and comments on student's research blogs by lecturers, their peers and guest speakers. The marking criteria and assessment format will be clearly indicated on the assignment brief and will be introduced in the first teaching session.

Research Journals: Students will be supported to create research blogs and will be asked periodically to share and comment on each others journals throughout both semesters. The lecturer will also maintain a module twitter account (or other appropriate social media platform) which will aggregate and display students' blog entries and offer a platform for lecturers to share module resources. Both the blogs and twitter account are intended to engender students in an outward facing and transparent approach to interaction design.

Formative Assessment: A mix of individual, peer-to-peer and group tutorials will be provided. Plagiarism All submissions will be checked using the university plagiarism software on Blackboard.

First Sit Components	Final Assessment	Element weighting	Description
Project - Component B		30 %	Coursework (project) 1
Project - Component B		45 %	Coursework (project 2)
Presentation - Component A	✓	25 %	Practical examination (oral presentation - 15 minutes presentation - exam period)
Resit Components	Final Assessment	Element weighting	Description
Project - Component B		75 %	Coursework (project)
Presentation - Component A	✓	25 %	Practical exam (oral presentation - 15 minute 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	Derive well-structured and workable schemas from unstructured and qualitative data, capturing domain entities, their attributes and constraints and the relationships between them
	MO2	Understand the value of data in an organizational and wider societal context. Appreciate the “context of use” and when and how this data needs to be authenticated, authorised, validated, mined, shared, secured and maintained
	MO3	Effectively use web standards for the retrieval and representation of data to derive meaningful and useful structure (form) and information (content) from a variety of web services
	MO4	Using relational databases, understand the emergence and uses made of very-large-scale data sets. Analyse through specific examples the isomorphic nature of these databases, how schemas are and can be applied and how these databases are queried, updated, replicated and maintained
MO5	Gather, organize, and express information clearly and accurately using both digital and non-digital media tools and modes of production	
Contact Hours	Contact Hours	
	Independent Study Hours:	
	Independent study/self-guided study	228
	Total Independent Study Hours:	228
	Scheduled Learning and Teaching Hours:	
	Face-to-face learning	72
	Total Scheduled Learning and Teaching Hours:	72
	Hours to be allocated	300
	Allocated Hours	300
	Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/modules/ufcf9l-30-2.html</p>