STUDENT AND ACADEMIC SERVICES

MODULE SPECIFICATION

Part 1: Information			
Module Title	Interactive Systems and Comfort Controls		
Module Code	UBLMHP-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	Architecture and the Built Environment
Department	FET Dept of Architecture & Built Environ		
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: This is an indicative list of what the syllabus will contain. Subjects will not necessarily be taught in this order nor be of equal weighting:

User Movement in Buildings : semantic design between user and technology; way- finding; cognitive engineering of doors, ironmongery and access control; experience of the mobile impaired; physiology of rapid vertical transportation; natural surveillance and secure by design.

Visual and Non-Visual Effects of Light on Users: : evolution of the eye; atmospherics; colour engineering; non-visual physiology of light; mood lighting; lighting control; psychological impact of interaction between daylight and electric light; experience of the visually impaired.

User Actions in Times of Emergency: effectiveness of alarms and signals; user response to smoke; crowd behaviour; psychology of the vandal; effective systems for emergency management.

User Interactions with Information and Communication Technologies: audio-visual systems; data networks; wireless sensor networks; augmented reality.

Facilitating a sustainable use of energy technologies: using semantic design to encourage low energy use of buildings; interface with HVAC controls; energy-use feedback; user education of technical systems.

Users and Buildings that Learn: smart/intelligent buildings; neural computing; genetic algorithms; the internet of things.

Teaching and Learning Methods: Contact time; Lectures and tutorials: 36 hours

Assimilation and development of knowledge: 74 hours

(A) Portfolio and presentation preparation: 20 hours

(B) Report preparation: 20 hours

Total study time: 150 hours

Scheduled learning Each topic will involve an introduction through lectures, when students will receive an explanation of the context of the subject and an indication of the depth to which they are expected to study it. Computer based tutorials will be used to explore the information sources available for student study.

Independent learning Students will be supported in their study with on-line resources including publications, websites, video clips and blackboard resources.

Part 3: Assessment

Strategy:
Assessment is designed to provide students with a structured approach to evaluating the interaction between building users and interactive systems. A range of learning activities and tasks contribute to a portfolio of work, which students will present and be questioned about. To accompany this broad cross-system analysis, students will then demonstrate a high level critical thinking by undertaking a deep and narrow literature review of one new system, reporting back on the evidence base in terms of strengths, weaknesses, opportunities and threats.

Assessment:
Component A: Portfolio and Presentation – 20 minutes (50%)
This controlled assessment is a presentation by the students of how user experience has influenced the detailed design and specification of a typical building and critical examination by the assessment team.

Component B: Literature Review 1500 words (50%)
Students will prepare a literature review of a proposed new building technology or system, exploring the evidence for the proposal in terms of strengths, weaknesses, opportunities and threats.

Formative feedback will be given in tutorials.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		50 %	Literature review (1500 words)
Presentation - Component A	✓	50 %	Portfolio and presentation (20 minutes)

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Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		50 %	Literature review (1500 words)
Presentation - Component A	✓	50 %	Portfolio and Presentation (20 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 table below**

Module Learning Outcomes	Reference
Undertake a User-Experience design review of a building project and derive, through applying engineering principles, a strategy for improving the experience of the user, both during normal building operation and in times of emergency	MO1
Design an innovative user interface for a building – by engineering both passive and active components – that encourages sustainable behaviours	MO2
Defend the usability of their design as part of a public consultation, when faced by conflicting requirements of owners, users, maintainers, constructers and designers	MO3
Undertake a literature review of a new building technology or system that influences the user experience, exploring : Strengths of the proposal, supported by an evidence base Weaknesses of the proposal, with lessons learnt from precedents Opportunities of the proposal, with an application of the developing context afforded by developments in other sectors Threats of the proposal, identifying the risks of failure	MO4

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/index.html

Part 5: Contributes Towards

This module contributes towards the following programmes of study: