ZCOM H1202: Human Computer Interaction

Module Title:	Human Computer Interaction
Language of Instruction:	English

Credits:	10

NFQ Level:	6

Module Delivered In	No Programmes

Teaching & Learning Strategies:	This module will be delivered using lectures and continuous assessment consisting of student research and the development of practical solutions to existing problems.

Module Aim:	To provide the student with a solid foundation in the area of Human Computer Interaction so that they can go on to develop their knowledge and skills in the area with the related modules that follow.

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	Appreciate the vital role played by a correctly built interface in the usability of any product; be they physical products or computer based applications.
LO2	Appreciate the evolution of Computer Interfaces and the resultant changes in methods of Human Computer Interaction from the early days of computer use to modern days.
LO3	Appreciate and recognise possible future developments in Interface and Interaction technologies.
LO4	Understand the human factors that must be taken into account when designing Computer Interfaces and Human Computer Interaction paradigms.
LO5	Know about a number of different approaches that can be used in the design of Computer Interfaces and the people involved in the design process.
LO6	Know about the processes involved in Usability Engineering and Usability Testing.
LO7	Experience the practical application of the theory by creating real world solutions

Pre-requisite learning
Module Recommendations *This is prior learning (or a practical skill) that is recommended before enrolment in this module.*
No recommendations listed
Incompatible Modules *These are modules which have learning outcomes that are too similar to the learning outcomes of this module.*
No incompatible modules listed
Co-requisite Modules
No Co-requisite modules listed
Requirements *This is prior learning (or a practical skill) that is mandatory before enrolment in this module is allowed.*
No requirements listed

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Module Content & Assessment

Indicative Content
The role and importance of the Computer Interface This topic will stress the vital role played by the interface
Existing, Developing and Possible Future Interfaces Formats; Methodologies; Devices; Awareness of on-going developments
Human factors to be considered The senses; Human memory limitations; How we process information; Ergonomics; Channels of human communication (text, voice, gesture etc)
Interface and Interaction Design Methodologies User involvement; Empirical approach; Predictive modelling approach etc
Usability engineering and usability testing Creating usable interfaces; Accessibility, Diversity and Inclusive Design

Assessment Breakdown	%
Project	100.00%

No Continuous Assessment

Project

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Project	Exercise 1: This will involve researching specific examples of pre-existing Interfaces and examining how they have developed over time and why these changes have occurred. This exercise will evaluate LO1 and LO2. This exercise will be worth 10%	1,2	10.00	n/a
Project	Exercise 2: This will involve researching the ongoing developments in the field of Interface development and Interaction paradigms and the student will be required to suggest their own novel methods of interaction. This exercise will evaluate LO3. This exercise will be worth 10%	3	10.00	n/a
Project	Exercise 3: This exercise will span a number of lab sessions. It will require the student to develop suggested solutions for interfaces that can accommodate different human capabilities so as to allow users of different abilities to be able to use the same products. It will also require the student to create interface solutions using HTML, CSS and other technologies as appropriate. This exercise will evaluate LO4 and LO7. This exercise will be worth 20%	4,7	20.00	n/a
Project	Exercise 4: This exercise will require the student to design, justify and present a novel interface to solve some existing or possible future interaction issue. The student will be required to produce: A Research Document; A Planning Document; A Design Document; Prototypes of their design and A Project Report. They will also be expected to give a formal presentation of their work. This exercise will reinforce all learning objectives of the module. This exercise will evaluate LO1, LO2, LO3, LO4, LO5, LO6 and LO7. This exercise will be worth 60%	1,2,3,4,5,6,7	60.00	n/a

No Practical

No End of Module Formal Examination

SETU Carlow Campus reserves the right to alter the nature and timings of assessment

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Module Workload

Workload: Full Time		
Workload Type	*Frequency*	*Average Weekly Learner Workload*
Lecture	Every Week	2.00
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	Total Hours	4.00

Discussion Note:	TEST