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MODULE DESCRIPTOR

Module Title

Human Computer Interaction

Reference	CM4110	Version	1
Created	April 2017	SCQF Level	SCQF 10
Approved	August 2017	SCQF Points	15
Amended		ECTS Points	7.5

Aims of Module

To provide the student with knowledge of the conceptual and theoretical aspects of HCI required to support future technological developments in user oriented approaches and the practical skills currently required to develop interfaces to interactive computer systems.

Learning Outcomes for Module

On completion of this module, students are expected to be able to:

- 1 Critically evaluate the impact of human factors and role of usability in the design of human system interaction and dialogue design.
- 2 Apply the concepts, principles and models of user-centred design methods to the design of interactive system interfaces.
- 3 Select appropriate evaluation techniques and undertake a usability evaluation.
- 4 Analyse the concepts, principles and models of the analytic evaluation and cognitive modelling methods to model and evaluate the design for an interactive system.
- 5 Specify requirements and techniques for the design of augmented reality, virtual reality, multimedia and hypermedia systems interaction.

Indicative Module Content

Human factors, Usability and UX. User classes and characteristics. Task based design methods. User object based design methods. Dynamic models. Dialogue design. Cognitive modelling. Scenario based design. Usability evaluation and Experimental evaluation. Cyber security and HCI. Interaction design for augmented and virtual reality systems, hypermedia systems and visualisation systems. HCI and Big Data.

Module Delivery

Lectures and directed reading are used to deliver HCI principles and design methods. Labs and tutorials are used to develop design exercises and to develop applied formative and summative usability and UX evaluation skills with a strong focus on applied employability skills.

Indicative Student Workload

	Full Time	Part Time
Contact Hours	48	N/A
Non-Contact Hours	102	N/A
Placement/Work-Based Learning Experience [Notional] Hours	N/A	N/A
TOTAL	150	N/A
Actual Placement hours for professional, statutory or regulatory body		

ASSESSMENT PLAN

If a major/minor model is used and box is ticked, % weightings below are indicative only.

Component 1

Type:	Examination	Weighting:	50%	Outcomes Assessed:	1, 4, 5
Description:	Exam.				

Component 2

Type:	Coursework	Weighting:	50%	Outcomes Assessed:	2, 3
Description:	Practical individual assignment.				

MODULE PERFORMANCE DESCRIPTOR**Explanatory Text**

Component 1: Exam worth 50% of total module assessment, Component 2: Practical individual assignment worth 50% of the total module assessment.

		Examination:						NS
		A	B	C	D	E	F	
Practical Exam:	A	A	A	B	B	C	E	
	B	A	B	B	C	C	E	
	C	B	B	C	C	D	E	
	D	B	C	C	D	D	E	
	E	C	C	D	D	E	E	
	F	E	E	E	E	E	F	
NS		Non-submission of work by published deadline or non-attendance for examination						

Module Requirements

Prerequisites for Module	None.
Corequisites for module	None.
Precluded Modules	None.

INDICATIVE BIBLIOGRAPHY

- 1 RITTER, F.E. BAXTER G.D. AND CHURCHILL, E.F. (2014) Foundations for Designing User-Centred Systems: What System Designers need to know about People. Springer.
- 2 ROSSON, M-B., and CARROLL, J., 2002. Usability Engineering: Scenario-Based Development of Human-Computer Interaction. Morgan Kaufmann.
- 3 SAURO, J. AND LEWIS, J.R. (2016) Quantifying the User Experience; Practical Statistics for User Research Morgan Kaufman
- 4 BENYON, D., (2014) Designing Interactive Systems: A Comprehensive Guide to HCI, UX and Interaction Design. Pearson