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MODULE DESCRIPTOR

Module Title

Human Computer Interaction

Reference	CM4110	Version	3
Created	June 2022	SCQF Level	SCQF 10
Approved	August 2017	SCQF Points	15
Amended	July 2022	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.

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Indicative Student Workload	Full Time	Part Time
Contact Hours	30	N/A
Non-Contact Hours	120	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:	Coursework	Weighting:	100%	Outcomes Assessed:	1, 2, 3, 4, 5
Description:	A coursework which involves the creation of a report to design and evaluate a chosen topic, adhering to HCI standards and principles.				

MODULE PERFORMANCE DESCRIPTOR

Explanatory Text

The calculation of the overall grade for this module is based on 100% weighting of C1. An overall minimum grade D is required to pass the module.

Module Grade	Minimum Requirements to achieve Module Grade:
A	The student needs to achieve an A in C1.
B	The student needs to achieve a B in C1.
C	The student needs to achieve a C in C1.
D	The student needs to achieve a D in C1.
E	The student needs to obtain an E in C1.
F	The student needs to obtain an F in C1.
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