

--MODULE DESCRIPTOR

MODULE TITLE	HUMAN COMPUTER INTERACTION AND USER EXPERIENCE		
MODULE CODE	CO2702 (L5)	CREDIT VALUE	20 UK CREDITS / <u>10 ECTS</u>
SCHOOL	SCHOOL OF SCIENCES		

MODULE AIMS

- To foster an understanding of the needs, abilities, limitations of computer users, of the techniques and technologies that can enable users to communicate effectively with computers, and the impact of user experience in this context.
- To develop the knowledge and skills necessary to enable students to model, design and evaluate interfaces with a focus on user experience.
- To enhance the students' desire, skills, and confidence to research HCI and UX topics for themselves.

MODULE CONTENT

Indicative syllabus content:

The module is about the processes of interface design, evaluation and user experience. It covers computer users, interaction technology and concepts, interaction applications, and the context of computer use. Students learn about user interface design using prototyping, and about methods for evaluating user experience. They practice key design and evaluation techniques in the context of a major assignment.

Syllabus Content:

The Nature of HCI and UX

Human Characteristics

Human Information processing

Language, Communication and Interaction

Accessibility

Computer System and Interface Architecture

Input and output devices and methods

Gestures

Interaction Applications for example

Mobile Technology

Wearable

Ubiquitous computing / Internet of Things

Virtual Reality / Augmented Reality

Design and Development

UX Design and more general Interaction Design approaches – to include modelling techniques

Design Guidelines

Designing the User Experience

Implementation techniques – prototyping techniques

Evaluation

General Usability evaluation techniques – to include predictive and summative methods

UX Evaluation techniques

INTENDED LEARNING OUTCOMES

On successful completion of this module a student will be able to:

1. Describe a range of interfaces, input and output modes and environments that may be found in a modern computer system
 2. Model users, systems and processes
 3. Design a suitable interface for any given class of users within any given application environment
 4. Critically evaluate the user interfaces and user experience for any given piece of software or hardware
 5. Find information about HCI and UX topics from a variety of sources, including books, journals, and the world wide web
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TEACHING METHODS

There will be an emphasis on applying the theoretical underpinnings of HCI and UX to real world examples. Students will be expected to follow the complete life cycle of a project from conceptualisation, modelling the human, design and evaluation. Lectures will be used to deliver the theory and core concepts whilst tutorial classes will expose the students to a range of techniques including the creation of personas, various evaluation techniques as well as literature searches. Where possible research undertaken by the module tutor or guest lecturers will be used to inform the content of lectures and tutorials especially in relation to evaluation and design.

ASSESSMENT METHODS

This module is assessed through the design and evaluation of an interactive application.