

MODULE DESCRIPTOR

MODULE TITLE	User-Centred System Design and Evaluation		
MODULE CODE	CO4754	CREDIT VALUE	20 / 10 ECTS
SCHOOL	SCHOOL OF SCIENCE		

MODULE AIMS

The aims of the module are to:

1. Explore practical aspects of user-centred design and user-centred evaluation
2. Develop skills in design methods
3. Develop skills in prototyping
4. Develop skills in evaluation
5. Ensure awareness of relevant ethical and legal considerations.
6. Provide experience in the planning and writing of evaluations
7. Encourage a critical approach to system design and evaluation

MODULE CONTENT

This is an inherently practical module that introduces the principles of user-centred design and evaluation. The module is delivered in two halves, the first half considers design and supports the learning of students to carry out a group design project – the second section considers evaluation.

Content includes:

Alternative design approaches including User-centred, technology-centred and task-centred design
 Ideation methods including probes, ideo cards, creative design activities

Using personas and scenarios in design studies

Sketching and communicating design ideas – pros and cons of lo-fi prototyping

Creating and delivering rapid prototypes

Principles of interface design

Evaluation approaches including Expert evaluations, User testing, Design critique

Inspection-based evaluation methods including heuristic evaluations and cognitive walkthroughs

User-based evaluations including think aloud, user tests, survey methods

Using logging tools in evaluations

Reporting evaluation studies

Critiquing design methods and evaluation methods

INTENDED LEARNING OUTCOMES

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

1. Design and build an interactive prototype from a design specification.
2. Critically evaluate an interactive product and report findings in an appropriate way.
3. Justify the appropriateness of evaluation methods for a particular situation and critique the limitations.
4. Justify the appropriateness of design methods for a particular situation and critique the limitations.
5. Work in a team to interpret a design specification and develop and evaluate prototypes.

TEACHING METHODS

The theoretical material will be delivered during lecture sessions; these will be available on the web for online use where they will be augmented with additional learning materials and tasks. Face to face and online seminar sessions will give the students the chance to discuss and present their work in a critical environment. For online students, communications technology will be used to bring their work to a critical audience.

This is an inherently practical module that is assessed practically. During the first half of the module, students perform an assessed group design project. Typically, the team agree on a design problem and the associated users and will collectively develop a design specification – this will be worth approximately 20% of the assignment marks and all members will normally receive the same mark. Each team member will then be individually assessed (circa 60% of the assignment marks) on their contribution to the development of a design solution and on their contribution to an interactive prototype and will critically evaluate their own design processes. The team will collectively evaluate the interactive prototypes against the initial design brief and provide a single report which will be worth approximately 20% of the assignment marks with all members will normally receiving the same mark. This activity overlaps with the teaching of evaluation methods.

The second assessment is an individual assignment that involves the practical evaluation of an interactive system, selecting and using two or more appropriate evaluation methods, justifying choices, writing up the evaluation and creating a list of problems and features to be fixed.

ASSESSMENT METHODS

This module is assessed through a Prototype (team) (50%) and an evaluation (50%).