DSGN H4424: Human Centred Design & Interaction

Module Title:	Human Centred Design & Interaction
Language of Instruction:	English

Credits:	10

NFQ Level:	8

Module Delivered In	No Programmes

Teaching & Learning Strategies:	The learner is immersed in a range of collaborative, problem-solving activities, to investigate and evaluate where design can propose solutions for commercial and social benefit. The holistic, student-centred, studio-based approach, facilitated by faculty, is intended to negotiate, facilitate and guide learner engagement and scaffold a deep-learning using the following strategies: • Lectures • Studio-based learning, • Presentation, • Workshop, • Self-directed independent learning

Module Aim:	The aim of this module is to develop the learner's understanding of human centred research and interation and how it relates to designed artefacts. The objective is to assist the learner in establishing a human-centred design research methodology appropriate to their project type and category. It will assist the student in understanding human needs in relation to their design work, allowing them to make design decisions and market the project as a basis of design solution. It aims to collect stakeholder knowledge and interation touchpoints at various stages of the design process with a view to creating usable and meaningful products. It aims to understand both physical and cognitive human factors issues for product design and demonstrate the ability to test human factors of a product. The learner will also demonstrate the application of information derived from research and testing into their final design. The findings derived from this module transfer to the Product Design Innovation module for the development of the Honours Degree Project

Learning Outcomes	
On successful completion of this module the learner should be able to:	
LO1	To demonstrate skills in applying creative solutions to human needs.
LO2	To express appropriate judgement in direction of research and testing
LO3	To demonstrate a detailed knowledge of end users and to understand human-centred testing and interation within the design process
LO4	To apply research and test results into a product design
LO5	To demonstrate independent learning and drive required to intergrate research into a design project.

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
Early Stage Research Primary Research (Interviews, Observation,Questionnaires, User trips) Secondary Research (Literature reviewing, Benchmarking, Internet searches, Journal reviewing, Safety guidelines, Material selection)
Design Proposal Project Proposal, Research Methods, Research Brief, Research Findings and Analysis
Design Recommendations Hypothesis, Project Brief, Conclusions & Recommendations from Research in Design Report
User Experience Task Analysis, Interation Matrix, Journey Mapping and Product Syntax
Design Testing and Co-Design Test Rigs, User Testing with Sketch Models, Co-Designing
Final Model Creation of a final model. This can be either a working or an appearance model derived from and as a conclusion to user testing in line with Honours Degree Project
Final Design Application of human-centred research findings in final design
Design Studio (Resources) A dedicated space designed to allow for studio-based learning. This space is specific to a particular learning group. While used to deliver studio-based education the space is available to accommodate learners outside scheduled/timetabled hours. It provides a safe learner-driven, peer-reviewed environment, supported on a one-to-one basis. It supports the synthesis of parallel concurrent modular knowledge, skills and competency with prior learning & personal aesthetic judgement, to resolve specific design research question/s.
Workshop/Materials (Resources) This is a dedicated space to allow learners to test, evaluate and represent the application of their research through 3D physical workshop made models. Resourcing of a workshop space include machinery, tools and materials. Materials such as modelling foam, MDF, Jelutong, Cardboard, foam board are all essential to investigation of developing a design solution.
Computers/Plotters/Printers (Resources) In this year, each learner requires the use of a personal computer of suitable specification to run software used on the design programme. There should be access to printing and plotting facilities in order to complete final deliverables for the Honours Degree Project.

Assessment Breakdown	%
Continuous Assessment	100.00%

Continuous Assessment

Assessment Type	*Assessment Description*	*Outcome addressed*	*% of total*	*Assessment Date*
Project	Primary Research, Secondary Research and analysis /synthesis of data into findings i.e. Hypothesis and Project Brief	2,3,4,5	30.00	n/a
Project	Human Centered Mapping:Task Analysis, Journey Mapping and Interation Matrix/ Product Syntax	1,2,3,4	20.00	n/a
Project	Building Test Rigs, Conducting User Testing with Sketch Models. Final Model.	1,2,3,4,5	20.00	n/a
Oral Examination/Interview	Honours Degree Project Defence, Synthesis & Professional Reflective Practice - Learners will present for interview and submit Honours Degree Project. Synthesis will be demonstrated through final Design report and end of year exhibition.	1,2,3,4,5	20.00	Week 30
Reflective Journal	Reflective Practice: reviewing approach, engagement, performance in human-centred design with aligned modular elements and identification of future developmental need/s in design practice	1,2,3,4,5	10.00	Week 30

No Project

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*
Studio Based Learning	Every Week	4.00
Independent Learning Time	Every Week	2.00
	Total Hours	6.00