



Unit Title	Design Approaches 2
FHEQ Level	Level 4
Unit Code	DPR18103
Credit Value	15 Credits
Unit Type	Subject

Learning Hours			
Staff – Student Contact Hours		Independent Study Hours	
Classes	45	Independent Study	60
Supervised access to resources		Preparation for Assessment	30
		Unsupervised Access to Resources	15
Total			150

Unit Description

The aims of the unit will be achieved across multiple projects that contrast in nature and outcome; example problem / opportunity focus could include: Material property, User problem, Reaching a target Market, exploiting a manufacturing process or technology.

On this unit we aim to help students cultivate the progressive skillset acquired in the Design Skills unit, this unit allows students to understand the context of the Design Process as a method to address a variety of design problems.

The projects in the Unit will need to inform and test the students understanding of qualitative and quantitative research necessary for a User Centered Design approach. Focusing on, human factors, ergonomics, understanding behaviors and gathering insights. Using various ethnographic and observational gathering, recording and analysis techniques students will apply this found data to their design thinking and problem solving.

Each project will need to challenge students in a ‘close to real’ scenario integrating problems which are relatable to the cohort and current real life issues. Ideally the unit will conclude with a project where students will be able to originate new ideas which solve real problems, applying theory to real practice.

The Design Process - the overall series of steps taken to transform an initial idea into a completed solution.

User-Centred Design - the tools and techniques we use to understand the needs and behaviours of our intended user group

The Five Principles underpin the Mindsets and Skillsets Manifesto and are the foundation upon which all course curriculum frameworks and unit specifications are based. The relevant Principles as stated below have been mapped against the Learning Outcomes relevant to each course unit and at each level (see Programme Specifications for full description of the Five Principles):

1. Cultivate / Where the individual thrives.

2. Collaborate / Where disciplines evolve.
 3. Integrate / Where education engages industry.
 4. Advocate / Where purpose meets practice.
- Originate / creativity meets technology.

Unit Indicative Content

Continued development of skills

- Design Research methods used in User Centered Design, (primary and secondary)
- Recording and interpretation of data identified in Primary research (ethnography, human behaviours)
- The gathering and analysis of data identified in Secondary research, including the use of database resources in the Study Zone.
- Mapping of collective data findings and how they inform design thinking, Human factors, User Stories

Summarising of Skills taught

- Applying Design research skills to a Design Process through application of a number of product design projects

Unit Aims

- Understand the concept User Centered Design
- Gain Knowledge on appropriate Primary and Secondary research methods for design problem solvers
- Basic understanding of recording research information
- Basic understanding analysis of research data for design problem solvers
- Basic understanding of how Design research is used by design professionals

Unit Learning Outcomes

LO 1 Research/Inspiration

Demonstrate your capacity for information gathering techniques using a wide range of sources, providing visual, contextual and industry case-study research as appropriate.

Related Principle: ORIGINATE

LO 3 Development/Prototyping

Demonstrate a range of tests and solutions, informed by knowledge of the principles of the creative process.

Related Principle: INTEGRATE

LO 4 (Pre) Production

Identify, select and apply an appropriate selection of processes, materials and methods that inform creative and academic practice.

Related Principle: COLLABORATE

LO 5 Presentation /Storytelling For Influence

Evidence effective communication of projects, whether in visual, oral or written form.

Related Principle: ADVOCATE

Learning and Teaching Methods

This unit will be delivered using a combination of:

- Project Briefing,
- Topic Lectures / Demonstrations,
- Project work,
- Group Tutorials,
- Individual and Group research work,
- Individual Presentations and critiques
- Self-directed independent study

Assessment methods and tasks

Brief description of assessment methods

Assessment tasks	Weighting (%) (<i>one grade or multi-grade unit</i>)
Portfolio of project work with supporting models and digital material, which could include: Research reports, Prototypes, Final models, Pitch presentations, Images of development and final work, Blog, Presentation sheets.	This unit is assessed holistically 100% of the unit

Indicative Assessment Criteria

Assessment criteria are the basis on which the judgment of the adequacy of the work is made. A more detailed assessment criteria will be specified in the brief.

A design project(s) communicating the processes replicated from the principles demonstrated in the teaching sessions.

1. Demonstrate knowledge and awareness of the fundamental principles of human factors, ergonomics and ethnography (LO 1,3)
2. Demonstrate the ability to have divergent thinking skills and think creatively whilst still satisfying the needs of the project/client (LO 1,3,)
3. Demonstrate the ability to generate design concepts in response to a defined ethnographic project study to a conclusion in 3D and 2D (LO3)
4. Demonstration of how to effectively articulate ideas and information to a wide audience (LO 5)

5. Demonstration of improvement in the use of an iterative design process, with reference to previous unit (LO3,4)
6. Demonstration of an understanding of material properties and manufacturing process (LO 1,4)

Essential Reading list

1. Bramston, D, 2016, **Idea searching for design : how to research and develop design concepts**, Bloomsbury
2. Dent, A, 2014, **Product design**, Thames and Hudson
3. Klein, N, 2015, **This Changes Everything: Capitalism vs. the Climate**, Penguin
4. Lefteri, C, 2012, **Making it : manufacturing techniques for product design**, Laurence King
5. McDonough, W, 2009, **Cradle to cradle : remaking the way we make things**, Vintage
- Berger, L, 2012, **All work, no pay : finding an internship, building your resume, making connections, and gaining job experience**, Ten Speed, Publishers Group UK
- Chipchase, J, 2013, **Hidden in plain sight : how to create extraordinary products for tomorrow's customers**, Harper Collins
6. Newbery, P 2013, **Experience design : a framework for integrating brand, experience, and value**, Wiley
7. Reis, D, 2010, **Product design in the sustainable era**, Taschen

Journals:

Designweek

Dezeen

Wallpaper

Site resources:

Material Connexion physical and digital database