

Liverpool John Moores University

Title: Human Factors In Design
Status: Definitive
Code: **4003PD** (117708)
Version Start Date: 01-08-2011

Owning School/Faculty: Liverpool School of Art & Design
Teaching School/Faculty: Liverpool School of Art & Design

Team	Leader
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Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 60.00

Total Learning Hours: 240 **Private Study:** 180

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	8.000
Practical	8.000
Seminar	8.000
Tutorial	4.000
Workshop	32.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Artefacts	AS1	Design Project	70.0	
Report	AS2	Design Specification Report	30.0	

Aims

- 1: *To introduce students to the principles of human factors applied within the product design process*
- 2: *To develop students' understanding of the relationship between human factors and the selection of a product component configuration*
- 3: *To develop students' understanding of appropriate material and process selection relative to human factors considerations*
- 4: *To enable students to apply human factors principles in the generation, development and communication of ideas*

Learning Outcomes

After completing the module the student should be able to:

- 1 1 Demonstrate the use of ergonomic and anthropometric data within their design concepts
- 2 2 Research and evaluate component configurations relative to human factors considerations
- 3 3 Demonstrate an awareness of user interaction issues with regard to material and process selection relative to human factors considerations
- 4 4 Demonstrate an awareness of human factors principles in the generation, development and communication of ideas

Learning Outcomes of Assessments

The assessment item list is assessed via the learning outcomes listed:

Artefact	1	3	4
Report	2		

Outline Syllabus

Introduce notions of design approaches and underpinning parameters of human Factors including:
user scenarios
Task analysis
primary research
analysing problems
user interaction
Ergonomics and Anthropometrics
Design aesthetics
Semiotics and Semantics
Recording and presenting data
Design specification

Learning Activities

As a key part of the delivery and learning within this module students will undertake

human centred primary research and competitor product research with regard to broader contextual issues.

Establishing matrixes and other visual techniques to record and present data.

Further analysis and evaluation of this data will form key design parameters and priority decision making. These activities will result in a written design specification that informs the students design outcomes.

References

Course Material	Book
Author	Evans, D.
Publishing Year	2007
Title	Cool Hunting
Subtitle	A Guide to High Design and Culture in the Twentieth Century
Edition	
Publisher	Southbank, London
ISBN	

Course Material	Book
Author	Lidwell, W., Holden, K. and Butler, J.
Publishing Year	2005
Title	Universal Factors in Design
Subtitle	
Edition	
Publisher	Rockport Publishing, Massachusetts
ISBN	

Course Material	Book
Author	McDonagh, D.
Publishing Year	2007
Title	Design and Emotion
Subtitle	
Edition	
Publisher	Taylor and Francis, New York
ISBN	

Course Material	Book
Author	Pheasant, S.
Publishing Year	1986
Title	Bodyspace
Subtitle	Anthropometry, Ergonomics and Design
Edition	
Publisher	Taylor and Francis, New York
ISBN	

Course Material	Book
Author	Sparke, P.
Publishing Year	1986
Title	An Introduction to Design and Culture in the Twentieth Century
Subtitle	
Edition	
Publisher	Allen and Unwin, Australia
ISBN	

Course Material	Book
Author	Tilley, A.R.
Publishing Year	2002
Title	The Measure of Man and Woman
Subtitle	Human Factors in Design
Edition	
Publisher	Wiley, New York
ISBN	

Notes

Infuse design projects with the underpinning human factors, 'design for the real world', by establishing people profiles outside ones' own personal perception.