Liverpool John Moores University

Title:	EMBODIMENT PRACTICE
Status:	Definitive
Code:	**5005TECH** (105295)
Version Start Date:	01-08-2016
Owning School/Faculty:	Electronics and Electrical Engineering
Teaching School/Faculty:	Electronics and Electrical Engineering

Team	Leader
Adam Papworth	Y

Academic Level:	FHEQ5	**Credit Value:**	12	**Total Delivered Hours:**	30
Total Learning Hours:	120	**Private Study:**	90		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Practical	30

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Preliminary layout	10	
Essay	AS2	Mockup prototypes	40	
Essay	AS3	Rapid prototypes	40	

Aims

This module allows students to gain experience of the embodiment design phase. This highly itterative phase of design is predominately concerned with the the development and testing of models and prototypes in order to determine the products final physical form.

Learning Outcomes

After completing the module the student should be able to:

1 Define a designs preliminary layout
2 Develop a range of models and prototypes
3 Select materials based on product form, function and cost

Learning Outcomes of Assessments

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

CW	1
CW	2
CW	3

Outline Syllabus

Preliminary Layouts:
Design architecture, modular, Integrated spatial constraints, confirguration and parametrics, aesthetics and ergonomics.

Models and Prototypes:
Graphical, mathematical, computational (simple finite element and moulding analysis), empirical, mock-ups from paper, card, foam, clay, wood, metal etc, rapid prototypes.Aesthetics and ergonomics.

Material Selection:
Ashby material selection, charts, other material selection considerations, process/ production considerations, standard design components, optimise and complete form design and definitive layout.

Learning Activities

This is a practical module almost solely delivered within the design modelling workshop and advanced manufacturing facility. Students will be encouraged to produce a range of models and prototypes in order to define the design detail.

Notes

This is a practical design module that requires students to practice a range of model building and drawing skills.