Liverpool John Moores University

Title:	CREATIVE DESIGN PRACTICE
Status:	Definitive
Code:	**4006TECH** (105272)
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:	FHEQ4	**Credit Value:**	12	**Total Delivered Hours:**	36
Total Learning Hours:	120	**Private Study:**	84		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	12
Practical	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Group Conceptual Design Exercise	40	
Essay	AS2	Group Conceptual Design and Modelling Project	60	

Aims

To provide underpinning skills to understand and solve simple open ended problems during the inventive phase of design projects. The module will allow students experience of the creative aspects of design, from identifying new opportunities to low fidelity modelling.

Learning Outcomes

After completing the module the student should be able to:

1	Solve simple open-ended design problems
2	Use ideation methods to create and refine design choices.
3	Produce freehand sketches and render persuasive images of product ideas.
4	Construct mock-up prototypes of design solutions.

Learning Outcomes of Assessments

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

CW	1	2	3	
CW	1	2	3	4

Outline Syllabus

The design process. Convergent/ divergent approaches. The conceptual design phase.
Conceiving, developing and recording design ideas. Design briefs, initial specifications and design logbooks/ reports.
Problem formulation and need recognition.
Ideation process. Seeing, imaging, present and test cycle. Freehand sketching and persuasive images.
Creative thinking techniques. Brainstorming, sketchstorming, brainwriting, mindmapping, roleplay, story boards and mood boards.
Systematic idea generation. Checklists and morphological charts.
Teamwork and the creative environment.
Critical thinking. What if's and the 5 why's.
Testing. Low fidelity mock-up prototypes using a variety of media.

Learning Activities

By a series of problem based lectures, design workshops and case studies.

Notes

This module shall provide the fundamental skills required in the innovative design phase of any design project. It will be delivered in the Creativity Centre and focus heavily on teamwork, idea generation and visualisation activities.