Liverpool John Moores University

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Title:	Design Visualisation
Status:	Definitive
Code:	**4162PDE** (121744)
Version Start Date:	01-08-2021
Owning School/Faculty:	Engineering
Teaching School/Faculty:	Engineering

Team	Leader
Fang Guo	Y

Academic Level:	FHEQ4	**Credit Value:**	20	**Total Delivered Hours:**	44
Total Learning Hours:	200	**Private Study:**	156		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	22
Practical	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Test	Test	In-class traditional sketching test	50	
Portfolio	Portfolio	Digital sketching Portfolio	50	

Aims

Develop fundamental sketching, rendering and modelling skills

Learning Outcomes

After completing the module the student should be able to:

1	Develop a concept visual using hand sketching techniques
2	Create persuasive conceptual imagery using 2D sketching software
3	Demonstrate a knowledge of aesthetic aspects including colour and texture

Learning Outcomes of Assessments

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

Inclass traditional sketchtest	1	3
Digital sketching portfolio	2	3

Outline Syllabus

Module introduction
Module guide; aims; learning outcomes; assessment and marking schemes. Outline syllabus; module timetable and student feedback. Availability of student version of PhotoShop; minimum system requirements e.g. hard disk space, memory required, processor, video card.

Knowledge & understanding
- Understanding perspectives
- Understanding design aesthetics
- Identifying the trend of design
- Awareness of branding

Skills & other attributes
- Hand sketching
- Design presentation
- Computer skills (2D software e.g. Photoshop…)
- Ideating /concept generation

Freehand sketching:
Sketching tools, preparation. line types, arches, circles and ellipses, proportion and scale, one and two point projection, parallel projection, isometric projection. Shading and colour. Multi view sketches, construction lines, auxiliary and section views, annotations. Line weight, material, colour, texture, lighting, shadows, reflections, rendering, composition and backgrounds.

Computer aided 2D sketching:
Commercial and open source software for digital sketching and rendering 2D scenes. Underlying concepts e.g.: vector versus raster graphics; compression; file size versus quality; file formats;.PSD;.JPEG; .PNG; etc.
Composition: Creating an environment. Focal point; overlapping; negative space (or shape); lines; balance; contrast; proportion. Position of lighting, resultant shadows,

reflections and rendering of materials and textures.
Compositing: Colour spaces; colour remapping; colour correcting; image manipulation; mattes; image-matte relationship.
Digital drawing: Basic shapes and construction; lines; contours; hatching; colour; texture; rough and refined line work; scanning; digitising the drawing; image manipulation; cropping; sizing; filtering.
Tools: Selection tools; drawing tools; rectangular marquee; move; crop; brush; eraser; paint; bucket; gradient tool; pen tool; etc.
Other tools: Copy; merged; stroke; transform; image; size.
Layers: Background; general layer; text Layer; group.

Learning Activities

This module will be delivered through an integrated series of lectures and tutorialised practical sessions; of which 50% will be synchronous online and 50% face to face. The learning activities are to be student focused and develop the students design knowledge through experiential learning.

Notes

This module is delivered using a variety methods including lectures, seminars, tutorials and practical sessions. The module will be delivered from a product design perspective.