

Liverpool John Moores University

Title: TECHNOLOGY AND PRACTICE 1
Status: Definitive
Code: **4011ID** (109944)
Version Start Date: 01-08-2011

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

Team	Leader
Gary Brown	Y

Academic Level: FHEQ4
Credit Value: 12.00
Total Delivered Hours: 52.00
Total Learning Hours: 120
Private Study: 68

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	33.000
Online	3.000
Workshop	16.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	By submission of project and supporting work.	100.0	

Aims

*To introduce the student to the technical aspects of the built environment;
To introduce a working understanding of environmental energies, materials, services and their interrelationships.
To provide an introduction to the main constructional systems widely used for buildings & interiors in the UK.
To impart a basic understanding of the relevant issues relating to fire resistance, movement and methods of construction/assembly.*

To enhance students learning by initiating the first components of a personal development portfolio.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand and analyse those buildings illustrated in the lectures.
- 2 Appreciate innovatory technical thinking in design.
- 3 Demonstrate a basic understanding of the environmental issues faced by the designer in design for major building types.
- 4 Have knowledge of basic anthropometrics data.
- 5 Have knowledge of the basic compositional nature of materials.
- 6 Have knowledge of the properties of some constructional methods.

Learning Outcomes of Assessments

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

ESSAY	1	2	3	4	5	6
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Outline Syllabus

Eight lectures illustrating the building technology and practical construction aspects of 12 buildings from the primitive hut through to contemporary examples. Eighteen environmental science lectures introducing basic concepts in the design of heating and lighting systems for buildings..Four Lectures on the nature of materials and their manipulation

Two lectures on construction materials. One lecture on structures. Four half-day (4 hour) seminar workshops constituting a hands-on physical exploration of the knowledge gained in the first semester through the production of physical models to explore concepts. (beam theory, day lighting,).Students will learn how to organise & structure a progress file, document and archive coursework, and identify key action points for future development.

40% coursework hand in associated with writing up and reflecting on the workshops. 60 % project reflecting basic knowledge of anthropometrics, natural lighting and materiality integral with concurrent design project. Note studentship as defined in the student handbook is an integral part of assessment.

Learning Activities

Seminar / Lectures, Workshops, Reviews

Relates to Interior Design Outcomes, A2, A4, A6, B5, B6, C2, C3, C4, D1

Linked to Drawing & Visualisation anthropometric data associated with motion and facilitation of space.

References

Course Material	Book
Author	BUNSELL, AR.
Publishing Year	2005
Title	Fundamentals of fibre reinforced composite materials /
Subtitle	
Edition	
Publisher	Institute of Physics,
ISBN	

Course Material	Book
Author	SZOKOLAY, SV.
Publishing Year	2004
Title	Introduction to architectural science : the basis of sustainable design / Amsterdam ; Oxford
Subtitle	
Edition	
Publisher	Architectural Press
ISBN	

Course Material	Book
Author	SALOMON, T.
Publishing Year	2003
Title	The energy saving house / Centre for Alternative Technology
Subtitle	
Edition	
Publisher	
ISBN	

Course Material	Book
Author	LEATHERBARROW, D.
Publishing Year	2002
Title	Uncommon ground : architecture, technology, and topography / Cambridge, Mass. ;
Subtitle	
Edition	
Publisher	London : MIT
ISBN	

Course Material	Book
Author	PERSON, D
Publishing Year	1994
Title	'Earth to Spirit'

Subtitle	
Edition	
Publisher	Gaia Books
ISBN	

Notes

This module introduces students to the technical aspects of the built environment; including environmental energies, materials, services and their interrelationships and the main constructional systems widely used for buildings & interiors in the UK.