

Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY 1
Status: Definitive
Code: **4500BEQR** (127418)
Version Start Date: 01-08-2021

Owning School/Faculty: Civil Engineering and Built Environment
Teaching School/Faculty: Oryx Universal College WLL

Team	Leader
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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 62
Total Learning Hours: 200 **Private Study:** 138

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	40
Workshop	20

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	SCENARIO BASED REPORT	50	
Exam	AS2	EXAMINATION - CLOSED BOOK	50	2

Aims

To introduce the student to construction techniques associated with domestic dwellings including building regulations and building services.

To develop an understanding of the performance of buildings and the influence of materials and workmanship specification on performance.

Learning Outcomes

After completing the module the student should be able to:

- 1 Describe and compare a range of processes and techniques involved in the construction of the substructure work of domestic buildings.
- 2 Describe and compare, including illustrations, a range of processes and techniques involved in the construction of the primary elements of the superstructure of domestic buildings.
- 3 Describe and compare a range of processes and techniques involved in the construction of the secondary elements and finishes of domestic buildings.
- 4 Describe and compare a range of building services systems used in domestic buildings.

Learning Outcomes of Assessments

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

SENARIO BASED	1	2
EXAMINATION - CLOSED BOOK	3	4

Outline Syllabus

- *Substructure – domestic foundations of the forms of strip, raft and pile foundations for domestic buildings. Mechanical plant used in substructure work. Excavations. Health and Safety in excavation work. Site investigations for housing sites. (Dealing with trees on site, high water tables, contaminated land etc.)*
- *Superstructure – Ground floor construction – suspended and solid floors. External Cavity Wall Construction. Timber Frame Construction. Timber upper floors. Pitched roofs – trussed rafters and purlin roofs. Flat Roofs – warm deck and cold deck in timber.*
- *Secondary Elements and Finishes – stair construction. Door and Window construction and fixing. Internal partitions. Dry lining of walls. Plaster boarding of ceilings. Sand and cement and asphalt screeds. Timber floor finishes. Floor and wall tiling. Painting timberwork. External cladding and rendering.*
- *Building Services – above and below ground drainage systems. Hot and Cold water supply and distribution. Internal environment control (heating/cooling). Electrical supply and distribution.*

Learning Activities

Lectures are used in order to identify and explain key concepts and theories and provide detailed information on particular subject areas within the module. They help to stimulate the student's interest in the subject area. Lectures may also include guest industry speakers to add industry context to the material.

Workshops are used to engage students in more intensive discussion and activity on particular subject areas within the module. This helps shape the student's own understanding and place the lecture material in context.

Notes

This module introduces the student to construction techniques associated with domestic dwellings including building regulations and building services and develops an understanding of the performance of buildings and the influence of materials and workmanship specification on performance.