

Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY AND PRACTICE
Status: Definitive
Code: **4100BEHN** (118167)
Version Start Date: 01-08-2012

Owning School/Faculty: Built Environment
Teaching School/Faculty: Built Environment

Team	Leader
John Gammon	Y

Academic Level: FHEQ4 **Credit Value:** 24.00 **Total Delivered Hours:** 68.00
Total Learning Hours: 240 **Private Study:** 172

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48.000
Tutorial	18.000

Grading Basis: BTEC

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1		40.0	2.00
Test	AS2		30.0	
Test	AS3		30.0	

Aims

- To introduce the student to construction techniques associated with low rise domestic dwellings including 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 Examine the issues of site selection and their influence on the feasibility of the project.
- 10 Describe and explain the role of the building regulations on construction form and methodology, and their likely future impact.
- 11 Demonstrate the range and application of Health & Safety legislation on construction process and projects, including the Health & Safety Policy.
- 12 Identify and quantify hazards and risks in construction projects, and how they are determined, mitigated, monitored and reported.
- 2 Demonstrate and explain the methods of construction typically applied in the formation of the substructure of residential buildings.
- 3 Demonstrate and explain the methods of construction typically applied in the formation of the above ground walls of residential buildings.
- 4 Demonstrate and explain the methods of construction typically applied in the formation of the floors of residential buildings.
- 5 Demonstrate and explain the methods of construction typically applied in the formation of the roof structure and coverings of residential buildings.
- 6 Demonstrate and explain the methods of construction typically applied in the control and management of moisture and ground water of residential buildings.
- 7 Demonstrate and explain the methods of construction typically applied in the application of finishes to floors, walls and ceilings
- 8 Demonstrate an understanding of the impact of sustainability on the construction form, process and site methodologies.
- 9 Explain and illustrate the types, functions and parts of domestic services and their interaction with the construction form and materials.

Learning Outcomes of Assessments

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

Exam	7	8	9	10	11	12
Test	1	2	3			
Test	4	5	6			

Outline Syllabus

Preliminary work associated with site selection and preparation.

Substructure - design and production issues, soils, foundations, excavations.

Superstructure – internal and external walls, flat and pitched roofs, ground and upper floors, internal finishes, domestic services and installation, sustainable construction.

Standards and Regulations- application of the approved documents, specifications

These elements will be considered with regards to function, performance, durability, cost and aesthetics.

Learning Activities

Lectures and tutorial workshops, supported where possible with site visits, guest lectures and videos.

Students should supplement their lecture notes with background reading; journals, digests, trade literature and also use the material that is available through electronic databases and manufacturers.

References

Course Material	Book
Author	Riley M. & Cotgrave, A.
Publishing Year	2008
Title	Construction Technology 1: House Construction
Subtitle	
Edition	2nd edition
Publisher	Palgrave Macmillan
ISBN	ISBN 0230203620

Course Material	Book
Author	Chudley, R & Greeno, R.
Publishing Year	2010
Title	Building Construction Handbook
Subtitle	
Edition	8th edition
Publisher	Butterworth-Heinemann
ISBN	ISBN 1856178056

Course Material	Book
Author	Bliss, S.
Publishing Year	2005
Title	Best Practices Guide to Residential Construction: Materials, Finishes, and Details
Subtitle	
Edition	
Publisher	John Wiley & Sons
ISBN	ISBN 0471648361

Notes

This module concerns the construction principles and processes associated with residential buildings. In addition there is delivery of a good level of general construction knowledge that will assist students in other modules at levels 1, 2 and 3, and going forward into industry.