

## Liverpool John Moores University

Title: CONSTRUCTION TECHNOLOGY AND SERVICES 1  
Status: Definitive  
Code: **4551BEFD** (118292)  
Version Start Date: 01-08-2011

Owning School/Faculty: Built Environment  
Teaching School/Faculty: Liverpool Community College

Team	Leader
Aseel Hussien	Y

**Academic Level:** FHEQ4      **Credit Value:** 24.00      **Total Delivered Hours:** 75.00  
**Total Learning Hours:** 240      **Private Study:** 165

### Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	48.000
Tutorial	24.000

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	technological task drawing based	50.0	
Exam	AS2	choice of questions	50.0	3.00

### Aims

*To introduce the student to construction techniques associated with the production of low rise domestic dwellings including building services.*

*To develop an understanding of the performance of buildings in use and the environmental impact of the design and production phase of a construction project.*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Produce construction drawings that are clear and comply with the appropriate Regulations and Standards.
- 2 Examine criteria for site selection and their influence on the feasibility of the project.
- 3 Identify methods of construction typically applied in the formation of substructure and superstructure of low rise domestic houses.
- 4 Analyse alternative technologies and materials in the context of regulations for domestic structures.
- 5 Outline the component parts of basic domestic services and their interaction with the core construction components.
- 6 Discuss the environmental impact of the design and production phase of a construction project.
- 7 Identify the main requirements of the Code for Sustainable Homes in relation to domestic buildings.

### **Learning Outcomes of Assessments**

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

REPORT	1	2	3	6
EXAM	4	5	7	

### **Outline Syllabus**

*Preliminary work associated with site selection and investigation.*

*Substructure – foundations, soil types and classification in addition to support.*

*Superstructure – external envelope, openings, floors, internal walls and partitions as well as roofs.*

*Domestic services and installation. Water, drainage, electricity gas, heating and lighting.*

*Overview of Code for Sustainable Homes*

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

### **Learning Activities**

Lectures and workshops, supported where possible with site visits and other relevant learning material. 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**

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

<b>Course Material</b>	Book
<b>Author</b>	Marshall, D. & Worthing, D.
<b>Publishing Year</b>	2006
<b>Title</b>	Construction of Houses
<b>Subtitle</b>	
<b>Edition</b>	4th Edition
<b>Publisher</b>	Estates Gazette Ltd.
<b>ISBN</b>	072820486X

<b>Course Material</b>	Book
<b>Author</b>	Chudley, R. & Greeno, R.
<b>Publishing Year</b>	2010
<b>Title</b>	Building Construction Handbook
<b>Subtitle</b>	incorporating current building & construction regulations
<b>Edition</b>	8th Edition.
<b>Publisher</b>	Butterworth-Heinemann
<b>ISBN</b>	1856178056.

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## Notes

This module develops the construction principles and processes associated with low rise residential buildings.