Liverpool John Moores University

Title:	REAL ESTATE CONTRUCTION TECHNOLOGY
Status:	Definitive
Code:	**4117BEUG** (118127)
Version Start Date:	01-08-2012
Owning School/Faculty:	Built Environment
Teaching School/Faculty:	Built Environment

Team	Leader
Mohd Nazali Mohd Noor	Y
Paul Kenny	
Alison Cotgrave	

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	24.000
Tutorial	24.000
Workshop	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1		50.0	
Exam	AS2		50.0	3.00

Aims

To introduce the student to construction techniques associated with the production of low rise domestic dwellings and high and low rise commercial and industrial framed buildings, both new build and refurbishment.
To introduce the technology of sustainable building construction and retrofit building fabric and services installations for commercial and industrial buildings to improve

environmental performance, and evaluate the impact on the long term financial viability of such installations.

Learning Outcomes

After completing the module the student should be able to:

1	Identify the various construction solutions available for low rise domestic buildings and understand correct terminology.
2	Describe and illustrate the various construction solutions available for low rise domestic buildings.
3	Describe and illustrate the various construction solutions available for low and high rise structural framed commercial buildings.
4	Compare and contrast different design solutions and methods of construction used for high-rise and low-rise commercial buildings and determine the most appropriate techniques in given scenarios.
5	Evaluate and describe the most suitable technologies for the maintenance, conversion and refurbishment of buildings in given scenarios.
6	Apply principles of sustainable construction design and construction in a given scenario.
7	Describe and discuss principles of sustainable construction.

Learning Outcomes of Assessments

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

CS Construction Project	4	6			
Examination	1	2	3	5	7

Outline Syllabus

Domestic buildings- design and production issues, foundations, external envelope and openings, floors, internal walls, domestic services and installation.
These elements will be considered with regards to function, performance, durability and aesthetics.
Commercial and industrial buildings- foundations and basements, structural frame types, wall claddings, roof structures and coverings, internal access provision including mechanical access provision, fire alarm, detection and fighting systems and passive measures used for protecting buildings from fire, integration of services using structural and non-structural methods.
Intelligent and sustainable building design, use and management.
The technology of refurbishment, conversion and maintenance.

Learning Activities

Lectures, tutorials and workshops, supported where possible with site visits 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
Publisher	Palgrave Macmillan
ISBN	0230203620

Course Material	Book
Author	Riley M. & Cotgrave A
Publishing Year	2009
Title	'Construction Technology 2: :Industrial and Commercial Building'
Subtitle	
Edition	2ND
Publisher	Palgrave
ISBN	0230575714

Course Material	Book
Author	Riley, M. & Cotgrave, A.
Publishing Year	2005
Title	'Contruction Technology 3 :The Technology of Maintenance and Refurbishment'
Subtitle	
Edition	
Publisher	Palgrave
ISBN	1-4039-4095-9

Course Material	Book
Author	Hall F. & Greeno R.
Publishing Year	2005
Title	'Building Services Handbook'
Subtitle	
Edition	
Publisher	Butterworth-Heinemann
ISBN	0750664606

Course Material	Website

Author	LJMU Learning and Information Service
Publishing Year	
Title	Construction Information Service
Subtitle	
Edition	
Publisher	
ISBN	

Notes

This module aims to introduce Real Estate Management students to domestic and commercial building technologies in a context that is relevant and applicable to the REM discipline. After completion of the module the student should have an understanding of new build and refurbishment technologies that are commonly used in domestic and commercial buildings in the UK and also of the benefit of the use of sustainable technologies in determining the whole life value of buildings and the impact on sale and rental potential.