Liverpool John Moores University

Title:	Sustainable and Lean Principles within Construction
Status:	Definitive
Code:	**7318BEPGDL** (121032)
Version Start Date:	01-01-2016
Owning School/Faculty:	Built Environment
Teaching School/Faculty:	Built Environment

Team	Leader
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Academic Level:	FHEQ7	**Credit Value:**	20.00	**Total Delivered Hours:**	11.00
Total Learning Hours:	200	**Private Study:**	189		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Online	11.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Portfolio	Portfolio	Industry case study based	100.0	

Aims

To identify and critically appraise how environmental sustainability and lean principles can be incorporated into a more modern and innovative construction organisation and industry.

Learning Outcomes

After completing the module the student should be able to:

1	Identify and critically assess the effects of construction on the natural environment.
2	Critically evaluate the application of innovative and practical solutions within the construction industry context.
3	Define and use various environmental performance measurement tools.
4	Examine the developments and characteristics of lean-based approaches to managing construction projects.
5	Critically appraise the benefits and barriers to implementing lean in construction project environments.
6	Apply a lean based approach to a specific project management situation.

Learning Outcomes of Assessments

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

Case Study Based Portfolio	1	2	3	4	5	6

Outline Syllabus

Sustainable development - historical context
Climate change and energy use
Construction waste and industrial ecology
Performance measurement/business process innovation
Lean principles - historical context
Lean based approaches, barriers and benefits
Lean and Project management
Lean and green - synthesis

Learning Activities

The module will be delivered via online recorded lectures, webinars and activities. Case studies will be used as part of the activities and online discussions.

Notes

The module provides a wide ranging study of sustainability and lean principles affecting a modern construction sector.