Liverpool John Moores University

Title:	MANUFACTURING OPERATIONS MANAGEMENT
Status:	Definitive
Code:	**6006ENGFRI** (117012)
Version Start Date:	01-08-2016
Owning School/Faculty:	Maritime and Mechanical Engineering
Teaching School/Faculty:	Maritime and Mechanical Engineering

Team	Leader
Jun Ren	Y

Academic Level:	FHEQ6	**Credit Value:**	10	**Total Delivered Hours:**	26
Total Learning Hours:	100	**Private Study:**	74		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	12
Tutorial	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam		70	2
Essay	Essay		30	

Aims

To develop an understanding of modern manufacturing planning and organisation in the context of global manufacturing.

Learning Outcomes

After completing the module the student should be able to:

1 Employ the principles of material control in a modern manufacturing organisation
2 Use the control of information and data and their application in the planning and execution of manufacturing
3 Critically review the characteristics of a manufacturing company in terms of manufacturing organisation

Learning Outcomes of Assessments

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

Exam	1	3
Essay	2	3

Outline Syllabus

Demand management: forecasting, patterns of demand; qualitative and quantitative methods.
Operations planning: Aggregate Production Planning, Master production scheduling, Materials requirements planning.
Inventory management: ABC analysis, EOQ modelling, Application of EOQ.
Lean/Agile manufacturing: JIT, Kan-ban systems, one-piece flow and set-up time reduction.
Modern operations management: ERP, MRPII, the culture and manufacturing techniques.
Information flow and modelling and its application in manufacturing operations.

Learning Activities

Lectures, tutorials and computer-based laboratories

Notes

The module deals with modern, world class manufacturing principles. The work explores: The relationship between manufacturing data and organisation in terms of planning, scheduling and cost, lean/agile manufacturing, and modern management principles in world class manufacturing organisations.