Liverpool John Moores University

Title:	Logistics and Materials
Status:	Definitive
Code:	**5108MAR** (121822)
Version Start Date:	01-08-2021
Owning School/Faculty:	Engineering
Teaching School/Faculty:	Engineering

Team	Leader
Jun Ren	Y

Academic Level:	FHEQ5	**Credit Value:**	20	**Total Delivered Hours:**	42
Total Learning Hours:	200	**Private Study:**	158		

Delivery Options
Course typically offered: Semester 2

Component	Contact Hours
Lecture	22
Off Site	8
Tutorial	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Report 2000 words	40	
Exam	AS2	2 hour exam	60	2

Aims

To examine issues relating to warehousing and inventory management, including application of a range of numerical techniques to assist with optimisation

Learning Outcomes

After completing the module the student should be able to:

1 Develop an awareness of the elements of logistics, their mutual interaction and with other elements of business activity.
2 Demonstrate an appreciation of some of the analytical and management techniques in current use in these areas.
3 Demonstrate understanding of current developments in purchasing, inventory management, production planning, and customer service.
4 Appraise the effectiveness of a range of case studies in the field of logistics operations and materials management.

Learning Outcomes of Assessments

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

Report 2000 words	4		
Examination	1	2	3

Outline Syllabus

The aims of Logistics; Components of logistics; Logistics systems
Supply chain design and integration; SCM software; Modern SCM systems
Strategic decisions ; logistics/SC strategy, design, planning and operations
Define the role of Purchasing/Procurement; Choose suppliers; Purchasing cycle; Types of purchasing
Purchasing model and applications
demand management; Forecasting, qualitative and quantitative methods. production planning; The master Production scheduling process. Planning bills; The master Production scheduling process. Material requirements planning
Value-adding role and function of warehousing; basic warehousing decisions; warehouse activities. Warehouse layout design; private versus public warehousing; Distribution plan Logistics/SC modelling and simulation, Elements of Inventory Management; Inventory Control Systems ABC analysis; Economic Order Quantity (EOQ) Model; Application of EOQ models: Production model, quantity discount model.

Learning Activities

Integrated series of formal lectures and tutorials.

Notes

A module which examines optimisation in the fields of logistics and inventory management.