### **Liverpool** John Moores University

Warning: An incomplete or missing proforma may have resulted from system verification processing

Title: Supply Chain Modelling

Status: Definitive

Code: **7158MAR** (122696)

Version Start Date: 01-08-2021

Owning School/Faculty: Engineering Teaching School/Faculty: Engineering

Team	Leader
Jun Ren	Υ

Academic Credit Total

Level: FHEQ7 Value: 10 Delivered 18

**Hours:** 

Total Private

Learning 100 Study: 82

Hours:

**Delivery Options** 

Course typically offered: Semester 2

Component	Contact Hours		
Lecture	12		
Tutorial	6		

**Grading Basis:** 50 %

#### **Assessment Details**

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Written coursework containing qualitative and quantitative elements	100	

#### **Aims**

To equip students to use a variety of quantitative methods to analyse and solve problems in logistics

# **Learning Outcomes**

After completing the module the student should be able to:

- 1 Show a critical awareness of the quantitative tools available for logistics planning
- 2 Synthesise models to support decision making and operations throughout the supply chain
- 3 Systematically evaluate the role of KPIs in logistics management
- 4 Critically analyse supply chain planning and control issues

### **Learning Outcomes of Assessments**

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

Written coursework 1 2 3 4

# **Outline Syllabus**

Logistics modelling
Materials management, MRP, fulfilment
Stockholding, order picking and replenishment
Demand forecasting and impact on the whole supply chain
Analysing time and inventory
Cost analysis
Cost and performance monitoring

## **Learning Activities**

A programme of lectures supported by tutorials

#### **Notes**

Through the use of appropriate modelling techniques, this module evaluates supply chain operations in a quantitative way in order to allow for optimisation of performance.