

Liverpool John Moores University

Title: PORT AND SHIP CARGO OPERATIONS
Status: Definitive
Code: **6003MAR** (106052)
Version Start Date: 01-08-2016

Owning School/Faculty: Maritime and Mechanical Engineering
Teaching School/Faculty: Maritime and Mechanical Engineering

Team	Leader
Barbara Kelly	Y

Academic Level: FHEQ6
Credit Value: 24
Total Delivered Hours: 51
Total Learning Hours: 240
Private Study: 189

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	36
Tutorial	12

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1		70	3
Essay	AS2	assignment	15	
Essay	AS3	assignment	15	

Aims

To examine in detail the movement of general and gas cargoes by sea, and through port.

Learning Outcomes

After completing the module the student should be able to:

- 1 Identify those features in the design of container, RoRo and gas carriers essential for the particular cargo carried;
- 2 Discuss the problems peculiar to general and gas cargoes;
- 3 Determine by calculation the moisture conditions within a space
- 4 Assess the methods and costs of lashing general cargoes
- 5 Evaluate the factors involved in operating container and dry bulk terminals
- 6 Analyse the use of quality management systems in ports

Learning Outcomes of Assessments

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

EXAM	1	2	3	4	5	6
CW	1	2				
CW	4					

Outline Syllabus

Liquid Cargoes

The carriage of liquid gas by sea. The design, operation and management of gas tankers.

Safe operational techniques for liquified gas carriers

General Cargoes

General cargo characteristics and problems. Design of container and RoRo vessels.

Cargo environment control and calculations. Refrigerated cargoes.

Packaged dangerous goods. Container and RoRo securing systems.

Break bulk trade including forest products.

Port Operations

Analysis of Container and dry bulk terminal layout and operational equipment provision. Evaluation of required terminal area and the costs and other operating parameters of the equipment. Quality management in ports. ISO 9000 series and TQM

Port ownership and pricing

Learning Activities

Lectures and tutorials supported by videos.

Notes

Examines in detail 1) significant specialised marine cargoes and the systems and techniques needed for their safe and efficient transport. In particular natural gas and general cargoes are studied; 2) the layout and operation of maritime container and dry bulk terminals and 3) quality management in ports.