#### **Liverpool** John Moores University

Title: CARGO WORK AND SHIP MAINTENANCE

Status: Definitive

Code: **5016MAR** (105588)

Version Start Date: 01-08-2016

Owning School/Faculty: Built Environment Teaching School/Faculty: Built Environment

Team	Leader
Kenneth Buckle	Υ

Academic Credit Total

Level: FHEQ5 Value: 12 Delivered 40

80

Hours:

Total Private Learning 120 Study:

Hours:

#### **Delivery Options**

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	30
Practical	5
Tutorial	5

**Grading Basis:** 40 %

#### **Assessment Details**

Category	Short	Description	Weighting	Exam
	Description		(%)	Duration
Essay	AS1	Time constrained	50	
Essay	AS2	Coursework	25	
Essay	AS3	Coursework	25	

#### Aims

To develop a sound knowledge of the structural requirements of vessels with respect to the handling and carriage of cargo, damage limitation, maintenance and preparations for surveys including drydock. Secondly the student will also develop a sound knowledge at a management level for the safe loading, carriage and discharge of various cargoes with an appreciation of the regulatory requirements

applying to this task.

#### **Learning Outcomes**

After completing the module the student should be able to:

- 1 Demonstrate an understanding of structural requirements and features.
- 2 Evaluate maintenance methods and procedures.
- 3 Critically evaluate preparation for survey of vessel and its equipment including drydock.
- Appreciate the processes involved in the planning of the stowage, and securing of dry cargoes, stores and equipment.
- Demonstrate understanding of the stowage and handling of oil, liquid and gas cargoes and explain operating procedures.
- 6 Justify the planning and operational procedures for passenger operations.

#### **Learning Outcomes of Assessments**

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

CW	1	2	5	6
CW	1	3		
CW	4			

## **Outline Syllabus**

Loadline: International codes for the construction of ships.

Damage limitation features: Strengthening for ice.

Planned maintenance, Maintenance: Materials and equipment, storage and disposal of materials.

Maintenance of FFA and LSA.

Drydocking: Preparation of specification and of vessel, planning and management. Preparation for survey: Hull, machinery, lifting appliances, loadline, safety.

Dry cargo: Stowage and securing for containers, Ro-Ro, refrigerated, deck, bulk, packaged dangerous goods, stores and equipment.

Preload survey, port rotation, cargo plans, draught survey, space preparation, securing equipment, heavy lift operations, cargo damage, care on passage.

Oil, Liquid and Gas cargo: Safety, planning, testing, dangers, flammable diagram, ballast.

Inert gas system.

Tank cleaning.

Pollution prevention, operational and design.

Passenger Operations: Access, safety, hazardous cargo, baggage handling, security at sea, death, heavy weather, watertight doors, complaints, customer care.

# **Learning Activities**

Lectures and tutorials.

### **Notes**

This module covers the STCW Deck Officer requirements for ship maintenance and cargo operations at a management level.