

Liverpool John Moores University

Title: CARGO OPERATIONS
Status: Definitive
Code: **5216NAU** (126771)
Version Start Date: 01-08-2022

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

Team	Leader
Hamid Sarwar	Y
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Academic Level: FHEQ5 **Credit Value:** 20 **Total Delivered Hours:** 62
Total Learning Hours: 200 **Private Study:** 138

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	56
Tutorial	4

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Cargo Operations	100	2

Aims

To assess the operational practices required for the efficient and safe movement of cargoes on ships.

Learning Outcomes

After completing the module the student should be able to:

- 1 Explain the processes, procedures and preparations involved in the movement of cargoes within regulatory requirements
- 2 Discuss the loading and unloading of cargoes within regulatory requirements.

Learning Outcomes of Assessments

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

Exam	1	2
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Outline Syllabus

Knowledge of and ability to apply relevant international regulations, codes and standards concerning the safe handling, stowage, securing and transport of cargoes

Knowledge of the effect on trim and stability of cargoes and cargo operations

Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits

Stowage and securing of cargoes on board ships, including cargo-handling gear and securing and lashing equipment

Loading and unloading operations, with special regard to the transport of cargoes identified in the Code of Safe Practice for Cargo Stowage and Securing

General knowledge of tankers and tanker operations

Knowledge of the operational and design limitations of bulk carriers

Ability to use all available shipboard data related to loading, care and unloading of bulk cargoes

Ability to establish procedures for safe cargo handling in accordance with the provisions of the relevant instruments such as IMDG Code, IMSBC Code, MARPOL 73/78 Annexes III and V and other relevant information

Ability to explain the basic principles for establishing effective communications and improving working relationship between ship and terminal personnel

Knowledge of the limitations on strength of the vital constructional parts of a standard bulk carrier and ability to interpret given figures for bending moments and shear forces

Ability to explain how to avoid the detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling

International regulations, standards, codes and recommendations on the carriage of dangerous cargoes, including the International Maritime Dangerous Goods (IMDG)

Code and the International Maritime Solid Bulk Cargoes (IMSBC) Code

Carriage of dangerous, hazardous and harmful cargoes; precautions during loading and unloading and care during the voyage

Learning Activities

Lectures and tutorials integrated with simulator sessions if appropriate and available.

Notes

This module will contribute to the underpinning knowledge required for progression to professional qualification.