

Liverpool John Moores University

Title: CONSTRUCTION AND CARGO
Status: Definitive
Code: **4213NAU** (126761)
Version Start Date: 01-08-2021

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

Team	Leader
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Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 82
Total Learning Hours: 200 **Private Study:** 118

Delivery Options

Course typically offered: S1 & S2 & Summer

Component	Contact Hours
Lecture	78
Practical	2

Grading Basis: 60 %

Assessment Details

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

Aims

To develop student knowledge of the construction of vessels and the safe carriage of cargo.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate an understanding of ship construction and inspection
- 2 Explain the processes required to ensure the safe handling, carriage and securing of cargoes

Learning Outcomes of Assessments

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

Exam	1	2
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Outline Syllabus

Ship construction

General knowledge of the principal structural members of a ship and the proper names for the various parts.

Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks

Knowledge and ability to explain where to look for damage and defects most commonly encountered due to:

loading and unloading operations, corrosion and severe weather conditions

Ability to state which parts of the ship shall be inspected each time in order to cover all parts within a given period of time

Identify those elements of the ship structure which are critical to the safety of the ship

State the causes of corrosion in cargo spaces and ballast tanks and how corrosion can be identified and prevented

Knowledge of procedures on how the inspections shall be carried out

Ability to explain how to ensure reliable detection of defects and damages

Understanding of the purpose of the "enhanced survey programme".

Cargo handling, stowage and securing

Knowledge of the effect of cargo, including heavy lifts, on the seaworthiness and stability of the ship

Knowledge of safe handling, stowage and securing of cargoes, including dangerous, hazardous and harmful cargoes, and their effect on the safety of life and of the ship

Ability to establish and maintain effective communications during loading and unloading

Learning Activities

Lectures and tutorials integrated with cargo loading simulator sessions.

Notes

This module will contribute to the underpinning knowledge required for progression to an Officer of the Watch professional qualification.