

Liverpool John Moores University

Title: SHIPBOARD PRACTICE
Status: Definitive
Code: **5217NAU** (126772)
Version Start Date: 01-08-2022

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

Team	Leader
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Academic Level: FHEQ5 **Credit Value:** 10 **Total Delivered Hours:** 49.5
Total Learning Hours: 100 **Private Study:** 50.5

Delivery Options

Course typically offered: Sum & Non Std S2 (S2 for Jan)

Component	Contact Hours
Lecture	36
Tutorial	12

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam	Manoeuvring and Emergencies	100	1.5

Aims

This module should enable students to demonstrate theory and application of how to manage the response to emergencies on board or external to the ship and to manoeuvre the ship.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate knowledge of appropriate responses to emergencies.
- 2 Assess factors to consider in the manoeuvring of ships

Learning Outcomes of Assessments

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

Exam	1	2
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Outline Syllabus

Thorough knowledge of life-saving appliance regulations (International Convention for the Safety of Life at Sea)

Organization of fire drills and abandon ship drills

Maintenance of operational condition of life-saving, fire-fighting and other safety systems

Actions to be taken to protect and safeguard all persons on board in emergencies

Actions to limit damage and save the ship following a fire, explosion, collision or grounding

Preparation of contingency plans for response to emergencies, and damage control

Methods and aids for fire prevention, detection and extinction

Functions and use of life-saving appliances

Action to be taken if grounding is imminent, and after grounding

Refloating a grounded ship with and without assistance

Action to be taken if collision is imminent and following a collision or impairment of the watertight integrity of the hull by any cause

Assessment of damage control

Emergency steering

Emergency towing arrangements and towing procedure

Precautions when beaching a ship

Manoeuvring and handling a ship in all conditions, including:

manoeuvres when approaching pilot stations and embarking or disembarking pilots, with due regard to weather, tide, headreach and stopping distances

handling ship in rivers, estuaries and restricted waters, having regard to the effects of current, wind and restricted water on helm response

application of constant- rate-of-turn techniques

manoeuvring in shallow water, including the reduction in under-keel clearance caused by squat, rolling and pitching

interaction between passing ships and between own ship and nearby banks (canal effect)

berthing and unberthing under various conditions of wind, tide and current with and without tugs

ship and tug interaction

*use of propulsion and manoeuvring systems
choice of anchorage; anchoring with one or two anchors in limited anchorages and factors involved in determining the length of anchor cable to be used
dragging anchor; clearing fouled anchors
dry-docking, both with and without damage
management and handling of ships in heavy weather, including assisting a ship or aircraft in distress; towing operations; means of keeping an unmanageable ship out of trough of the sea, lessening drift and use of oil
precautions in manoeuvring to launch rescue boats or survival craft in bad weather
methods of taking on board survivors from rescue boats and survival craft
ability to determine the manoeuvring and propulsion characteristics of common types of ships, with special reference to stopping distances and turning circles at various draughts and speeds
importance of navigating at reduced speed to avoid damage caused by own ship's bow wave and stern wave
practical measures to be taken when navigating in or near ice or in conditions of ice accumulation on board
use of, and manoeuvring in and near, traffic separation schemes and in vessel traffic service (VTS) areas*

Preparation for professional oral examination

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.