

Liverpool John Moores University

Title: BRIDGE WATCHKEEPING & EMERGENCY RESPONSE
Status: Definitive
Code: **4023MAR** (105585)
Version Start Date: 01-08-2016

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

Team	Leader
Farhan Saeed	Y

Academic Level: FHEQ4
Credit Value: 24
Total Delivered Hours: 88
Total Learning Hours: 240
Private Study: 152

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	44
Practical	22
Tutorial	22

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Computer Based or Oral examination on Buoyage & Lights	30	
Essay	AS2	Bridge Procedures & emergencies (Time Constrained 2hrs)	30	
Essay	AS3	Compass & Ship Handling Time Constrained Coursework (2hrs)	40	

Aims

To facilitate a thorough understanding of the Regulations for the Prevention of

Collision at Sea (COLREGS) and International Association of Lighthouse Authority (IALA) buoyage systems, and the use of magnetic and gyro compass steering systems.

Learning Outcomes

After completing the module the student should be able to:

- 1 Interpret and explain how to apply regulations and systems for the safe movement of vessels
- 2 Demonstrate a comprehension of bridge watchkeeping procedures.
- 3 Appreciate the factors affecting turning circles, stopping distances and how to make ship manoeuvres.
- 4 Explain and demonstrate the principles and use of magnetic and gyro compasses and steering systems
- 5 Develop contingency plans for use contingency plans in event of emergencies and a knowledge of response to distress signals

Learning Outcomes of Assessments

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

CW	1		
CW	1	2	5
CW	3	4	

Outline Syllabus

Knowledge of International Collision Regulations: COLREGS and IALA buoyage systems. Regulations and systems for the safe movement of vessels
Bridge Resource Management: Bridge watchkeeping procedures.
Preparations to bridge equipment prior to departure and arrival.
Logbooks, standing orders, night orders. Circumstances to call Master.
Communication Procedures: Procedures relating to communications with bridge and engine personnel
Sighting of Hazards: Action if ice or icing is observed or suspected
Navigation and Manoeuvring: Effects on manoeuvring, turning circles and stopping distances
Compass System: Information supplied by ships' compasses, Causes and nature of magnetic compass errors, Limitations of the gyro compass
Steering Gear and the Auto-pilot: Components of steering systems, and their function
The various forms in which steering information is relayed to the helmsman
Hazards and Emergencies: Recognise hazards and emergencies associated with the vessel
Means of warning: Type of alarms fitted to bridge equipment, and the action to take in the event of malfunction or failure of bridge equipment:

Contingency Service Operations: Contingency plans and action to take as OOW in the event of emergencies at sea or in port as applicable, execution of contingency plan.

Operation of Anchors: The use of anchors sufficient to ensure that the OOW could undertake duties involved in coming to a single anchor

Knowledge of Data Relating to Alarm Signals: Distress, Urgency and Safety signals

*Search and Rescue Communication: Communication: Communications with the distressed craft in accordance with International Regulations and procedures
Obtaining information on the position and nature of the distress*

Follow-up Measures: Further action required to comply with contingency planning and master's instructions:

Respond to Distress at Sea: General arrangements for search and rescue:

The International Code of Signals, send and receive signals.

Knowledge of Visual Signals: Visual safety, urgency and distress signals:

Learning Activities

Formal Lectures and tutorials including quizzes. Internet based software for self-learning and self testing is available to all students.

Notes

Provides the detailed knowledge required by an Officer of the Watch (Deck) on a Merchant Ship