

## Liverpool John Moores University

Title: BRIDGE WATCHKEEPING  
Status: Definitive  
Code: **4017NAU** (119097)  
Version Start Date: 01-08-2016

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

Team	Leader
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**Academic Level:** FHEQ4      **Credit Value:** 12      **Total Delivered Hours:** 67  
**Total Learning Hours:** 120      **Private Study:** 53

### Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	30
Practical	15
Tutorial	15

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Computer Based or Oral examination on Buoyage & Lights	30	2
Exam	AS2	Bridge Procedures & emergencies examination	30	2
Exam	AS3	NAEST exams	40	3

### 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, explain bridge watchkeeping procedures and electronic navigation 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 Develop contingency plans for use in the event of emergencies and a knowledge of response to distress signals.
- 4 Demonstrates a knowledge of Electronic Navigation Systems.

## **Learning Outcomes of Assessments**

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

Buoyage & lights Exam	1		
Bridge procedures exam	1	2	3
NAEST exams	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*

*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:  
Propagation of Radio Waves, ECDIS, LORAN, Echo Sounder, Log, Radar and  
ARPA, Radar Plotting Theory, DGPS & GPS, VDR and AIS.*

## **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