

## Liverpool John Moores University

Title: Bridge Management  
Status: Definitive  
Code: **5014NAU** (119095)  
Version Start Date: 01-08-2016

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

Team	Leader
Ewan Kirkbride	Y

**Academic Level:** FHEQ5  
**Credit Value:** 24  
**Total Delivered Hours:** 73  
**Total Learning Hours:** 240  
**Private Study:** 167

### Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	62
Tutorial	8

**Grading Basis:** 40 %

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	40	3
Essay	AS2	Bridge watchkeeping	35	
Essay	AS3	Emergency response and ship handling	25	

### Aims

*This module should enable students to demonstrate theory and application of how to manage the Navigation of the ship, 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 Establish watchkeeping arrangements and safety procedures.
- 2 Assess the operation and use of two types of modern compass.
- 3 Demonstrate a knowledge of Search and Rescue methods.
- 4 Respond to emergencies.
- 5 Know how to manoeuvre the ship.

## Learning Outcomes of Assessments

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

Exam	1	2	3
Bridge watchkeeping essay	1		
Emergency & manoeuvring	4	5	

## Outline Syllabus

*Identify all National and International legislation concerning safe navigation, navigation equipment, and qualifications for watchkeeping personnel.*

*Prepare standing and night orders.*

*Selection, use and knowledge of reliability of position fixing methods, paper and electronic chart and display systems. Use of the radar in collision avoidance.*

*The principle, operation and use of two types of modern compasses.*

*Drills training and response to all emergencies including but not restricted to piracy, heavy weather, shifting cargo, equipment failure, passenger incidents.*

*Procedures to adopt: for leaving port, correct use of pilots, manning and communication between engine room and bridge, in heavy weather.*

*Design features of: propulsion systems, steering devices, thrusters affecting manoeuvrability.*

*External factors effecting manoeuvrability, including shallow waters, weather and currents.*

*Understand how ship design affect manoeuvrability including use of ships manoeuvrability data.*

*Manoeuvre the ship in all situations, routine and emergency, including use of anchors and towage. Apply correct collision avoidance manoeuvre in all conditions of visibility*

*Principles of navigational watchkeeping under pilotage, at anchor and in port, use of bridge equipment, steering control systems, ICS Bridge Procedures Guide.*

*Preparations for sea, precautions to be taken before the onset of heavy weather, loadline items affecting seaworthiness, preparation for dry-docking and undocking, use and care of deck machinery.*

## Learning Activities

Lectures and tutorials

### **Notes**

The module covers the requirements concerning the safe navigation and manoeuvring of the ship and the correct use of its collision avoidance and navigation systems. It is intended for students who are following an approved STCW95 training programme at Chief Mate level however students undertaking a career in a shore based Marine industry who wish to develop an understanding of how the ship is managed may find it interesting.