

Liverpool John Moores University

Title: Ocean Navigation and Navigational Equipment
Status: Definitive
Code: **5504ALAM** (120669)
Version Start Date: 01-08-2015

Owning School/Faculty: Engineering
Teaching School/Faculty: Malaysian Maritime Academy

Team	Leader
Barbara Kelly	

Academic Level: FHEQ5 **Credit Value:** 24.00 **Total Delivered Hours:** 96.50
Total Learning Hours: 240 **Private Study:** 143

Delivery Options

Course typically offered: Non Standard Year Long

Component	Contact Hours
Lecture	70.000
Tutorial	24.000

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam		70.0	2.50
Test	Test		30.0	1.00

Aims

The module will enable the student to develop the techniques of ocean navigation and to understand the functioning of navigational equipment.

Learning Outcomes

After completing the module the student should be able to:

- LO 1 Solve navigational problems.
LO 2 Assess the function of compasses and navigational equipment on board ships.

Learning Outcomes of Assessments

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

Exam	LO 1 LO 2
Test	LO 1

Outline Syllabus

*Celestial Navigation and Sailings.
Integrated Navigation Systems (INS)
and Integrated Bridge Systems (IBS)
Voyage Data Recorder (VDR) and
Simplified Voy. Data Recorder S-VDR
Bridge Navigational Watch Alarm
System (BNWAS)
Parts and Function of Magnetic Compass
Permanent & Induced Magnetism and Coefficients
Heeling Errors and Constants
Magnetic Compass Error and Correction
Principles of Gyro Compass
Gyro Compass Errors and Corrections
Systems Under the Control of the Master Gyro and the Operation and Care of the
Main Types of Gyro Compasses*

Learning Activities

Lectures, tutorials and practical demonstrations.

Notes

This module will provide navigational skills required to manage the ocean passage of a vessel. It is intended to be studied by students following an approved STCW95 training programme who have spent some time on the bridge of a ship.