

Liverpool John Moores University

Title: Ocean Navigation and Navigational Equipment
Status: Definitive
Code: **5534ALAM** (123841)
Version Start Date: 01-08-2019

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

Team	Leader
Barbara Kelly	Y

Academic Level: FHEQ5
Credit Value: 20
Total Delivered Hours: 96.5
Total Learning Hours: 200
Private Study: 103.5

Delivery Options

Course typically offered: Non Standard Year Long

Component	Contact Hours
Lecture	70
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination	70	2.5
Test	AS2	In-class test	30	1

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:

- 1 Solve navigational problems.
- 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	1	2
Test	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.