

Liverpool John Moores University

Title: NAVIGATION
Status: Definitive
Code: **4103NAU** (121776)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Engineering

Team	Leader
Alan Bury	Y
Mike Stringfellow	

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 64
Total Learning Hours: 200 **Private Study:** 136

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	36
Tutorial	24

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination - Chartwork	80	3
Exam	AS2	Examination - Compass	20	1

Aims

To develop the students' knowledge and understanding of navigational principles and chartwork practice.

Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate an understanding of terrestrial and coastal navigation.
- 2 Explain the operation of magnetic and gyro compasses, including correcting for error.

Learning Outcomes of Assessments

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

Exam - Chartwork 1

Exam - Compass 2

Outline Syllabus

Charts and publications carried aboard ship

The use of Mercator Charts

Chart folio systems and their care

The procedures for and necessary corrections to update charts and publications including ECDIS

Navigational terms and use charts to find DR and EP

The use of visual methods of position fixing using chartered objects and compass errors by transit

Adjustments to the vessel's course and speed to take account of the passage plan requirements

The fundamental principles of passage planning

Routeing instructions and guidelines

The information supplied by ships' compasses

The causes and nature of magnetic compass errors.

Limitations of the gyro compass

Learning Activities

Students will gain the basic knowledge through lectures and demonstrations and these will be followed by tutorials to allow students to solve practical problems where appropriate.

Notes

This module can contribute to the underpinning knowledge required for progression to an Officer of the Watch professional qualification.