

## Liverpool John Moores University

Title: CHARTWORK, TIDES AND SAILINGS  
Status: Definitive  
Code: **4211NAU** (126759)  
Version Start Date: 01-08-2022  
  
Owning School/Faculty: Engineering  
Teaching School/Faculty: Engineering

Team	Leader
Alan Bury	Y
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**Academic Level:** FHEQ4  
**Credit Value:** 20  
**Total Delivered Hours:** 83.5  
**Total Learning Hours:** 200  
**Private Study:** 116.5

### Delivery Options

Course typically offered: S1 & S2 & Summer

Component	Contact Hours
Lecture	60
Practical	10
Tutorial	10

**Grading Basis:** Pass/Not Pass

### Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	Exam 1	Chartwork	50	2
Exam	Exam 2	Tides and Sailings	50	1.5

### Aims

*To develop student skills in traditional Navigational techniques*

### Learning Outcomes

After completing the module the student should be able to:

- 1 Demonstrate an understanding of terrestrial and coastal navigation.
- 2 Describe the general theory on the causes of tides and perform calculation involving times and heights of tides.
- 3 Perform sailings calculations related to course and distance.

### **Learning Outcomes of Assessments**

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

Exam 1	1	
Exam 2	2	3

### **Outline Syllabus**

*Terrestrial and coastal navigation*

*Ability to determine the ship's position by use of:  
landmarks, aids to navigation, lighthouses, beacons and buoys  
dead reckoning, taking into account winds, tides, currents and estimated speed*

*Sailings calculations and theory.  
Tidal theory. Time, height and stream calculations*

### **Learning Activities**

Lectures and tutorials integrated with practical sessions on the Navigation simulator.

### **Notes**

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

This is a Pass/not pass module - a mark of at least 65% in each component is required to pass the module.