

Liverpool John Moores University

Title: CHARTWORK & TIDES
Status: Definitive
Code: **4010MAR** (105572)
Version Start Date: 01-08-2016

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

Team	Leader
Alan Wall	Y

Academic Level: FHEQ4 **Credit Value:** 12 **Total Delivered Hours:** 40
Total Learning Hours: 120 **Private Study:** 80

Delivery Options

Course typically offered: Standard Year Long

Component	Contact Hours
Lecture	20
Practical	10
Tutorial	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	AS1	Chartwork Coursework (time constrained)	80	
Essay	AS2	Tidal Calculations (Time constrained)	20	

Aims

To provide a detailed appreciation and understanding on the use, care and correction of charts and publications on board ship and to learn how to determine courses and tidal levels.

Learning Outcomes

After completing the module the student should be able to:

- 1 Understand and apply plane trigonometry to maritime problems
- 2 Evaluate the procedures necessary to ensure that all paper and electronic charts and publications are maintained and corrected.
- 3 Use Mercator Charts for visual position fixing methods.
- 4 Use chartwork techniques to find the adjustments to a vessel's course to take account of passage plan requirements.
- 5 Describe navigational terms and calculate rhumline courses and distances.
- 6 Use tidal terminology and calculate the times and heights of tides worldwide.

Learning Outcomes of Assessments

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

CW	1	2	3	4	5
CW	6				

Outline Syllabus

*Plane Trigonometry: Sine, Cosine, Tangent & Inverses.
Management, correction and care of charts and publications.
Navigational properties of charts. Meridional Parts.
Visual position fixing.
Compass error. Course to steer. ETA. Adjustments.
Mercator, Plane and Parallel Sailings.
Tidal theory. Time, height and stream calculations.*

Learning Activities

Lectures and tutorial work in chart laboratory. Exercises using the ship simulation facilities

Notes

This module delivers the knowledge necessary to understand the use of charts and tides as prescribed by STCW for Deck officers.