

Liverpool John Moores University

Title: CHARTWORK AND TIDES
Status: Definitive
Code: **4521SAM** (122532)
Version Start Date: 01-08-2021

Owning School/Faculty: Engineering
Teaching School/Faculty: Springdale Academy Of Maritime Education (SAMET)

Team	Leader
Ewan Kirkbride	Y

Academic Level: FHEQ4
Credit Value: 20
Total Delivered Hours: 63
Total Learning Hours: 200
Private Study: 137

Delivery Options

Course typically offered: Runs Twice - S1 & S2

Component	Contact Hours
Lecture	50
Tutorial	10

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Exam	AS1	Examination one	30	1
Exam	AS2	Examination two	70	2

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 Evaluate the procedures necessary to ensure that all paper and electronic charts and publications are maintained and corrected.
- 2 Use Mercator Charts for visual position fixing methods.
- 3 Use chartwork techniques to find the adjustments to a vessel's course to take account of passage plan requirements.
- 4 Interpret navigational terms and derive courses and distances using charts.
- 5 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:

Exam One	5				
Exam Two	1	2	3	4	

Outline Syllabus

Management, correction and care of charts and publications. Navigational properties of charts.

Visual position fixing.

Compass error. Course to steer. ETA. Adjustments.

Plots the position of the vessel on a chart using latitude and longitude, or position lines derived from charted objects or from celestial observations including running fix and horizontal angles.

Determines the effect of current/tidal stream by construction on a chart.

Determines the effect of wind on ship's track.

Applies leeway to find course to steer.

Determines course to steer to counteract current/tidal stream by construction on a chart.

Determines speed made good by measurement on the chart and calculates ETA.

Applies magnetic and/or gyro compass errors to convert True to Compass and vice versa for ship's head and bearings.

Calculates adjustments to course for a change in magnetic or gyro compass error.

Learning Activities

Lectures and tutorial work in chart laboratory.

Notes

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