

Liverpool John Moores University

Title: Maritime Operations
Status: Definitive
Code: **4554BFC** (121553)
Version Start Date: 01-08-2020

Owning School/Faculty: Engineering
Teaching School/Faculty: Blackpool & Fylde College

Team	Leader
Barbara Kelly	Y

Academic Level: FHEQ4 **Credit Value:** 20 **Total Delivered Hours:** 82
Total Learning Hours: 200 **Private Study:** 118

Delivery Options

Course typically offered: Semester 1

Component	Contact Hours
Lecture	74
Tutorial	6

Grading Basis: 40 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Essay	Essay	Met (2500 words)	50	
Exam	Exam	C/M and compass	50	2

Aims

To develop an understanding of meteorological, oceanographic and climatological information for the purpose of forecasting weather and sea conditions along with providing an introduction to the use of magnetic and gyro compasses at sea and an opportunity to review previous modules from the perspective of a Senior Officer.

Learning Outcomes

After completing the module the student should be able to:

- 1 Observe a range of meteorological conditions and forecast expected weather
- 2 Justify predictions and forecasts using appropriate meteorological theory.
- 3 Evaluate the use of magnetic and gyro compasses at sea.
- 4 Compare and contrast the role of the Officer of the Watch with the role of the Chief Officer.

Learning Outcomes of Assessments

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

Met	1	2
C/M and compass	3	4

Outline Syllabus

- *Heating and cooling of atmosphere*
- *Frontal & Pressure Systems*
- *Winds & Currents*
- *Tropical Revolving Storms*
- *Ice*
- *Weather Observations & the use of Synoptic charts*
- *Climate zones and associated weather*
- *Characteristics of compass & calculating compass errors*
- *Structure and maintenance of magnetic compass*
- *Magnetism and Magnetic Fields*
- *Management roles and responsibilities onboard*

Learning Activities

Practical weather observations
Applying weather information into passage planning
Discussions on weather conditions and currents
Analysis of synoptic charts
Evaluate different kinds of compass and how they relate to operations at sea
Discuss the formations of TSS' and the weather than is associated
Evaluate and apply ice navigation techniques
Identify major global climate zones and weather associated.

Notes

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

found within the STCW syllabus.