Liverpool John Moores University

Title: Shipboard Operations

Status: Definitive

Code: **5012NAU** (119090)

Version Start Date: 01-08-2016

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

| Team | Leader |
|----------------|--------|
| Ewan Kirkbride | Υ |
| Barbara Kelly | |

Academic Credit Total

Level: FHEQ5 Value: 24 Delivered 100

Hours:

Total Private

Learning 240 Study: 140

Hours:

Delivery Options

Course typically offered: Runs Twice - S1 & S2

| Component | Contact Hours | |
|-----------|---------------|--|
| Lecture | 72 | |
| Tutorial | 24 | |

Grading Basis: 40 %

Assessment Details

| Category | Short Description | Description | Weighting (%) | Exam Duration |
|----------|----------------------|-----------------------|---------------|------------------|
| Exam | Exam 1 | Stability Examination | 40 | 2 |
| Exam | Exam 2 | Cargo Examination | 35 | 2 |
| Report | Report | Loading case study | 25 | |

Aims

To assess the operational practices required for the efficient and safe movement of cargoes on ships.

Learning Outcomes

After completing the module the student should be able to:

- Demonstrate knowledge of the theories and factors affecting stability and trim, at moderate and large angles of heel, as applicable to merchant ship management.
- 2 Asses the factors affecting trim, stability and stress.
- Explain the processes, procedures, preparations (and appreciate the regulatory framework) involved in the planning of the safe stowage, securing and carriage of dry cargoes, stores and equipment as well as the planning and operational procedures for safe passenger operations.
- Explain the handling of oil, liquid and gas cargoes and their operating procedures and the regulatory framework surrounding them.

Learning Outcomes of Assessments

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

Examination 1 1 2

Examination 2 3 4

Report 2 3 4

Outline Syllabus

Structural requirements for vessels with respect to the handling and carriage of cargo.

Stability/stress diagrams and stress calculating equipment.

Planning and operational procedures for the stowage and securing of dry cargoes, stores and equipment.

Planning and operational procedures for handling oil, liquid and gas cargoes.

Planning and operational procedures for passenger operations.

Theories and factors affecting stability and trim.

Factors affecting stability at moderate and large angles of heel.

The effect of damage and flooding on stability

Current national and IMO regulations concerning stability.

Learning Activities

Classroom based lectures and tutorials including the use of appropriate software based programmes where possible.

Notes

This module contributes to the knowledge required for a professional qualification for the Merchant Navy.