Liverpool John Moores University

Title:	Marine Technology Management
Status:	Definitive
Code:	**7000MTS** (126852)
Version Start Date:	01-08-2021
Owning School/Faculty:	Engineering
Teaching School/Faculty:	Engineering

Team	Leader
Sean Loughney	Y
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Academic Level:	FHEQ7	**Credit Value:**	20	**Total Delivered Hours:**	38
Total Learning Hours:	200	**Private Study:**	162		

Delivery Options
Course typically offered: Semester 1

Component	Contact Hours
Lecture	24
Tutorial	12

Grading Basis: 50 %

Assessment Details

Category	Short Description	Description	Weighting (%)	Exam Duration
Report	AS1	Managing technical projects with emphasis on risk assessment, safety analysis, regulation and certification.	40	
Exam	AS2	Exam 2-hour	60	2

Aims

The aim of this module is to provide knowledge about how vessel and offshore equipment and systems are managed. In particular the regulations, procedures and strategies that are in place to ensure the marine asset (vessel or offshore installation) is Fit for Service.

Learning Outcomes

After completing the module the student should be able to:

1 Explain and justify the essential role and responsibilities of the marine technical superintendent as a manager in the safe and effective operation of a vessel or offshore facility.
2 Show a critical awareness of the systems and equipment which must comply with international conventions, and the process of obtaining and maintaining certificates/certification.
3 Critically evaluate the full range of specialist knowledge and skills which are required to support the technical operation and maintenance of a vessel or offshore facility.
4 Consider the typical personnel needed and the qualifications and certification that they require in order to work in this field.
5 Analyse and critically evaluate the core management and leadership skills, which are needed for managing self and others within the context of the marine technical management environment.

Learning Outcomes of Assessments

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

Managing technical projects	2	3	
Exam	1	5	4

Outline Syllabus

Knowledge of safety management systems as well as internal and external auditing procedures as well as understanding the certification of compliance for vessels, and the management procedures that ensure marine structures remain in class. This includes but is not limited to study of compliance with relevant standards and adherence to regular surveys, in service, to ensure continuing compliance with the standards.

Awareness of Marine risk and safety (accident analysis including human life loss, property loss, and environmental impact) and the notions of frequency, consequences, acceptability, ALARP, etc. Risk assessment including risk acceptance criteria, hazard identification, frequency estimation, consequences analysis, and risk reduction methodologies.

Marine regulatory framework, comprising of rules and regulations covering design and operational issues of ships and offshore facilities.

A knowledge of systems and technologies covering fundamentals of ship/offshore facility design, propulsion (ships), machinery, and operation & maintenance, including, but not limited to emission abatement equipment, ballast water treatment

systems, and state-of-the-art energy efficient technologies.

Learning Activities

Lectures, Tutorials, Case Studies, Worked examples.

Notes

This module contributes to the development of specialist management skills required to operate in a management role such as that of a Marine Technical Superintendent.