

Course Title	Cargo Transport				
Course Code	MANS-322				
Course Type	Required				
Level	1 st Cycle				
Year / Semester	3 rd Year, Spring Semester				
Teacher's Name	Dr Andreas Frangos				
ECTS	7	Theory	Laboratory	Simulation	Tutorial
		4	2	----	----
Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> introduce the safe loading, securing, transporting and discharging of all the major types of cargo examine the basic issues of RO-RO Pax cargo operation offer detailed information on the handling of dangerous cargo elaborate on the effect of cargo in the ship's seaworthiness and stability discuss about the effect of cargo in vessel's and crew's safety describe the securing and the maintenance of communications procedures throughout cargo operations 				
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ul style="list-style-type: none"> safely load, secure, transport and discharge all the major types of cargo control all the major problems arising during a RO-RO Pax cargo operation deal with all types of dangerous cargo that might be transported with a vessel comprehend in detail the effect of cargo in the ship's seaworthiness and stability realize the effect of the cargo to the vessel's and crew's safety properly secure and maintain the communications throughout the cargo operations 				
Prerequisites	None	Required	None		
Course Content	<ul style="list-style-type: none"> Safe cargo transport 				

	<ul style="list-style-type: none"> • Dry cargoes and cargo declaration • Liquid cargoes & MSDS • Cargo spaces preparation, separation, inspection • Ventilation and control of transpiration • Organization of cargo stowing • Defining vessel sizes • Load lines and draft • Dangerous cargo • IMDG code and IMSB • Bulk cargo other than grain • RO –RO Pax vessels • Containerized cargo • Crude oil and product transport • Tanker ships • Transport of liquid cargoes • Refrigerated cargo transport • Timber transport • Coal, Bauxite and metal ore transport • Steel and steel product transport • Grain transport • Cargo in ballast tanks • Unitized cargo • Cargo securing. Calculations. Vehicle securing • Crossing seasonal zones. Cargo and draft calculations • Calculations related to the hold tanks cargo 										
Teaching Methodology	Lectures, in-class assignments, sound and video equipment, computer, projector, relevant software, cargo handling simulator										
Bibliography	<p>Required Textbooks/Reading:</p> <table border="1"> <thead> <tr> <th>Authors</th> <th>Title</th> <th>Publisher</th> <th>Year</th> <th>ISBN</th> </tr> </thead> <tbody> <tr> <td>Cpt Thomas, R.E., rewritten by Rankin, K.S.</td> <td>The properties and stowage of cargoes</td> <td>Glasgow, Brown,</td> <td>2008</td> <td>978-0-85714-798-8</td> </tr> </tbody> </table>	Authors	Title	Publisher	Year	ISBN	Cpt Thomas, R.E., rewritten by Rankin, K.S.	The properties and stowage of cargoes	Glasgow, Brown,	2008	978-0-85714-798-8
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Cpt Thomas, R.E., rewritten by Rankin, K.S.	The properties and stowage of cargoes	Glasgow, Brown,	2008	978-0-85714-798-8							

			Son & Ferguson		
	Recommended Textbooks/Reading:				
	Authors	Title	Publisher	Year	ISBN
	Taylor, L.G.	Cargowork	Glasgow, Brown, Son & Ferguson	1992	978-0-85174-605-5
IMO	Code for safe practice for cargo stowage and securing	IMO	2003	978-92-801-51459	
Assessment	Homework, in-class assignments, projects, exams, final exam.				
Language	English				