

Course Title	Marine Meteorology				
Course Code	MANS-212				
Course Type	Required				
Level	1 st Cycle				
Year / Semester	2 nd Year, Fall Semester				
Teacher's Name	Mr. Peristianis Vasileiou				
ECTS	6	Theory	Laboratory	Simulation	Tutorial
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Course Purpose and Objectives	<p>The main objectives of the course are to:</p> <ul style="list-style-type: none"> • present the meteorological instruments on board • introduce the characteristics of the various weather systems • analyze the weather reporting procedures • explain the symbols used in the synoptic chart and in the pilot charts • elaborate on the area weather prognosis given the prevailing weather conditions and other relevant information • display the characteristics of the revolving tropical storms and the best practices to avoid the dangerous semicircle • represent the structure of the depressions • exhibit the operation and the targets of the World Meteorological Organization • describe the meteorological codes • illustrate the weather prognosis procedures • demonstrate the ocean currents systems basics • exhibit the ice basics 				
Learning Outcomes	<p>After completion of the course students are expected to be able to:</p> <ul style="list-style-type: none"> • name and utilize the meteorological instruments on board and evaluate their readings • identify the major weather systems • fill a weather report following the proper procedure 				

	<ul style="list-style-type: none"> • receive analytic and forecasting charts, weather bulletins, NAVTEX weather reports, satellite photos • read in detail a synoptic and a pilot chart • make a local weather prognosis given the prevailing weather conditions and other relevant information • recognize the characteristics of revolving tropical storms and employ the best practices to avoid the dangerous semicircle • realize the importance of the services WMO is offering • code and decode meteorological data • apply weather prognosis practices to ensure a safe passage • comprehend the basics on the ocean currents systems • appreciate the development and distribution of sea ice 		
Prerequisites	None	Required	None
Course Content	<ul style="list-style-type: none"> • Atmosphere, its elements and its natural properties • Atmospheric pressure • Winds and waves • Clouds and precipitation • Visibility • General circulation of atmosphere • Regional wind systems • Air masses and fronts • Barometric Lows and Highs • Tropical revolving storms • Meteorological support for mariners • Meteorological observations on board • Weather forecasting • Ocean currents • Ice 		
Teaching Methodology	Lectures, in-class assignments, sound and video equipment, computer, projector, internet		

Bibliography	Required Textbooks/Reading:				
	Authors	Title	Publisher	Year	ISBN
	Meteorological office	Meteorology for Mariners	London HMSO	1996	0-114-00367X
	Recommended Textbooks/Reading:				
	Authors	Title	Publisher	Year	ISBN
Cornish, M., Ives. E.	Reeds Maritime Meteorology	Adlard Coles	2010	978-1408112069	
Meteorological office	Marine Observer's Handbook	London HMSO	1995	0-11-400297-5	
Assessment	Homework, in-class assignments, projects, exams, final exam.				
Language	English				