

Ship Handling & Emergency Procedures

Basic Course Specification					
Course Title	Course Code	Program on which the course is given			
Ship Handling & Emergency Procedures	BS 214	Bachelor			
Academic Year	Specialization (units of study)	Pre-Requisites			
2020-2021	Theoretical (2hrs/week) Application (2hrs/week) Credit 3 Cr	BS213			
Overall Course Objectives					
<p>On completion of this course, students should be competent to carry out the necessary skills for Maintaining a safe navigational watch, and respond to emergencies in a competent manner.</p> <p>The course based on in the light of IMO model course 7.03, to meet the mandatory requirements for knowledge, understanding and proficiency in Table A-II/1 of STCW as amended, for Function 3: Controlling the Operation of the Ship at the Operational Level.</p>					
Course Learning Outcomes. By successful completion of the course each student will be able to:					
Topic	Linking to PLOs	Midterm Assessment	12 th Week Assessment	Class Activities	Final Exam
1. Classify the types of propellers, Rudders, controllable and uncontrollable forces that affect the ship's maneuverability	a	√		√	
2. Define Advance, Transfer, drift angle, mid-ship point and Wheel over point	b	√			√
3. Describe the effect of Shallow Water on ship's behavior	b, d	√			√
4. Evaluate the necessary information to perform the appropriate maneuver	a, b		√	√	√
5. Analyze all available information supporting decision making while demonstrating appropriate procedures in case of emergency situation	e, f		√	√	√
6. Illustrate the turning circle and its effect on ship handling.	a, b	√			√
Course Content					
Lec./ Week #	Topic	Hrs. #	Theoretical	Application	
1	Introduction &. Controllable & uncontrollable forces in ship handling. Effect of Propeller and Rudder on ship maneuverability	4	2	2	
2	Effect of Wind and Current on ship's maneuverability and behavior. Effect of shallow water and ship's squat	4	2	2	
3	Mooring and unmooring Port side Alongside. Mooring Starboard side Alongside and RORO mooring	4	2	2	
4	The turning circle. Effect of Propeller, Rudder on ship maneuverability Practical	4	2	2	
5	Effect of Loading condition, Trim and List on ship's turning circle	4	2	2	

6	Factors affecting the amount of cable to be used Anchoring procedures- securing anchor at sea.	4	2	2
7	7th Week Exam	4	2	2
8	Respond to emergencies (P.O.B different cases (sighted , delayed)	4	2	2
9	Contingency plan for response to emergencies Demonstrates The turning circle and its effect on ship handling	4	2	2
10	Muster list and emergency teams Respond to emergencies(in case of fire)	4	2	2
11	Respond to emergencies(in case of collision) Respond to emergencies(in case of stranding , beaching	4	2	2
12	P.OB maneuvers (Williamson, Scharnow and delayed turn) and 12th Week Exam	4	2	2
13	Respond to emergencies.....(in case of abandon ship) Respond to emergencies.....(in case of steering gear failure	4	2	2
14	Respond to emergencies..... (in case of Search and rescue) Respond to Emergencies..... (in case of enclosed space)	4	2	2
15	IMO merchant ship search and rescue manual (IAMSAR) Revision of firefighting	4	2	2
16	Final Assessment			
Total Hours		60	30	30
Teaching & Learning Methods		Facilities Required for Teaching & Learning Methods		
<ul style="list-style-type: none"> Explaining and demonstrating the lesson contents – Delivery of experience - discussing and asking questions to interact with students – solving examples 		<ul style="list-style-type: none"> White Board & Data Show Bridge Simulator 		
Students Assessment Methods				
Assessment Schedule				
Assessment#1		Week 7		
Assessment#2		Week 12		
Assessment#3		Week 16		
Grading Method				
7th Week Assessment	Written exam	30%		
12 th week Assessment	Written exam	20%		
Class Activities	Participation - Quiz	10%		
Final Exam	Written exam	40%		
Total		100 %		
Assessment criteria shall meet the standards of the STCW 78 convention "as amended"; and in the light of the related IMO model courses.				

Staff Requirements	
Master FG/ Ph.D.	
List of References	
Course Notes	Essential Books
	D.J. House, Seamanship Technique. 3rd Ed. London, Heinemann ISBN 9781138676114 (IAMSAR) Volume III such that trainees will be able to use it effectively when faced with a search and rescue situation. (IMO Sales No. 963)
Recommended Books	Periodicals and Publications
Hoyer, H.H. The Behaviour and Handling of Ships (ISBN 0-787033-30602)	
Others (websites, e-books...etc)	
<ul style="list-style-type: none"> • International Convention on Standards of Training, Certification and Watch keeping for Seafarers (STCW) 1978, as amended. • International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS).2020 edition. 	

Accreditation Bodies
<ul style="list-style-type: none"> *Egyptian Authority for Maritime Safety (EAMS) *European Commission (EC) *ISO (9001 – 2015) DNV-GL* *Central Evaluation and Accreditation Agency Hanover, Germany (ZEVA) *Ministry of Education (KSA) Ministry of Higher Education (Greece)* *Ministry of Higher Education (Oman) *Commission for Academic Accreditation (CAA), Ministry of higher Education (UAE) *University of Plymouth, United Kingdom (dual degree)

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