

Human factors in Maritime Safety

Basic Course Specification					
Course Title	Course Code	Program on which the course is given			
Human factors in Maritime Safety	SE 402	Bachelor			
Academic Year	Specialization (units of study)	Pre-Requisites			
2020-2021	Theoretical (1 hrs/week) Application (3 hrs/week) Credit 2 Cr	None			
Overall Course Objectives					
The course enables the student to understand & identify the human factors that have an influence over the human element hence on maritime industry as a whole to avoid human errors and maritime causalities.					
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. Recognize the human factor as part of the system	a	√	√		
2. differentiate between human element & human factors	a	√	√	√	√
3. Understand the cultural differences effects	a&d	√			√
4. Recognize the importance of the human element in raising the safety operation & management.	a			√	√
5. Understand how far can the maritime industry be improved by focusing on the human factor	a	√			√
6. Recognize the IMO new behavior toward the human factor when creating any new instrument	a		√		√
Course Content					
Lec./ Week #	Topic	Hrs. #	Theoretical	Application	
1	Definitions: Human element- Human factor.	4	1	3	
2	Human Error- Human Error.	4	1	3	
3	Human resource- Human system- Human capital.	4	1	3	
4	Maritime Safety: Optimum maritime safety demands focus on people (human element)- Marine safety and pollution.	4	1	3	
5	Towards a total safety concept- The need for safety culture.	4	1	3	
6	The importance of safety cultures in safer shipping- The culture for safety at sea	4	1	3	
7	7 th Week Exam	4	1	3	

8	Maritime Safety “Cont.”: Safety of shipping and loss control- Maritime education and its role in improving safety on the sea.	4	1	3
9	What causes accidents- Fatigue as factor IMO Conventions and human factor (SOLAS, STCW, ISM Code, etc.): IMO, the dominate role played by the human element in safety at sea and environmental protection.	4	1	3
10	The action taken by IMO for human factor – The revised STCW Convention and human factor.	4	1	3
11	STCW 78, as amended in 2010 – The ISM Code and the human element (human element related initiatives).	4	1	3
12	Duties of officer of the watch (O.O.W.) and Assessment	4	1	3
13	Man power in crises and accidents – Seafaring as a stepping stone - Economic change and the human factor in seafaring.	4	1	3
14	The human factor in changing the role of classification societies- The human factor in ship safety (individual errors & accident analysis) – The human element and improving training.	4	1	3
15	Seafarers’ as an important human resource in maritime industry- Human rights at sea (Maritime lab our Convention 2006) – Human and organizational errors.	4	1	3
16	Final Assessment			
Total		60	15	45
Teaching & Learning Methods		Facilities Required for Teaching & Learning Methods		
Explaining and demonstrating the lesson contents – Delivery of experience - discussing and asking questions to interact with students – solving examples		White Board& data show		
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
Lecturer notes and sheets	SOLAS 74, ISM Code
Recommended Books	Periodicals and Publications
None	None
Others (websites, e-books...etc)	
None	

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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