

**ANNEX B OF CMO NO. 20, SERIES OF 2015
BACHELOR OF SCIENCE IN MARINE ENGINEERING
COURSE SPECIFICATIONS**

Course Code	:	Persman
Course Descriptive Title	:	Leadership and Teamwork
Course Credits	:	3 units
Lecture Contact Hours per Week	:	3 hours
Laboratory Contact Hours per Week	:	0 hours
○ Prerequisite	:	None
Reference/s	:	<ul style="list-style-type: none"> ○ Table A-II/1 and A-III/1 Function: Controlling the Operation of the Ship and Care for Persons on Board ○ STCW'78 as amended ○ IMO Model Course "Leadership and Teamwork" ○ Annex A of CMO No. 20, Series of 2015 (Curriculum Mapping for BSMarE)

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Application of leadership and team working skills	Working knowledge of shipboard personnel management and training	1. Organization of crew, authority structure, responsibilities <ul style="list-style-type: none"> - Describes typical shipboard organization - Explains management level, states positions and describes roles - Explains operational level, states positions and describes roles - Explains support level, states positions and describes roles - Outlines chain of command 	10 Hours
		2. Cultural awareness, inherent traits, attitudes and behaviours, cross-cultural communication <ul style="list-style-type: none"> - Explains cultural awareness - Gives examples of inherent cultural traits - Explains association between inherent traits, attitudes and behaviours - Describes special care needed in cross-cultural communication, especially on board ship 	
		3. Shipboard situation, informal social structures on board <ul style="list-style-type: none"> - Describes common informal structures with multi-cultural crews - Explains why informal social structures need to be recognized and allowed for - Describes actions to improve cross-cultural relationships 	
		4. Human error, situation awareness, automation awareness, complacency, boredom <ul style="list-style-type: none"> - Explains terms "active failures" and "latent conditions" - Explains errors of omission and errors of commission - Describes and explains a typical error chain - Explains situation awareness and gives a shipboard example - Describes actions subsequent to a near miss - Describes linkage between automation, complacency and boredom - Describes actions to address complacency and boredom 	
Application of leadership and team working skills (cont)	Working knowledge of shipboard personnel management and training (cont)	5. Leadership and team working <ul style="list-style-type: none"> - Explains functional and designated leadership - Describes leadership qualities including self-awareness, situation awareness, interpersonal skills, motivation, respect - Describes leadership characteristics, including persona, assertiveness, decisiveness, applying emotional intelligence - Describes leadership techniques, including, leading by example, setting expectations, providing oversight, delegating 	

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		<ul style="list-style-type: none"> - Outlines the differences between team and group behaviour - Describes the advantages of a team approach in shipboard operations - States the difference between a "standing team" and a "mission" or "task" team - Explains "team-of-one" and why it is common on board - States the features of good team communications 	
		<p>6. Training, structured shipboard training programme</p> <ul style="list-style-type: none"> - Outlines importance of structured shipboard training - Describes effective implementation of structured shipboard training - Explains responsibility of officers to provide structured shipboard training - Describes mentoring and coaching - Describes how trainee progress through shipboard training programmes is assessed - Describes recording and reporting of trainee progress - Describes company involvement in structured shipboard training programmes - Explains that training programmes have to be adjusted to suit ship's operational needs 	
Application of leadership and team working skills (cont)	A knowledge of related international maritime conventions and recommendations, and national legislation	<p>7. International maritime conventions</p> <ul style="list-style-type: none"> - Outlines intent, history and application of SOLAS convention, including the ISM and ISPS Codes - Outlines intent, history and application of MARPOL Convention - Outlines intent, history and application of STCW Convention and role of STW Sub-Committee - Outlines intent, history and application of Maritime Labour Convention - Describes the role of IMO with respect to maritime conventions - Describes the role of ILO with respect to maritime conventions - Describes how IMO and ILO collaborate with respect to maritime conventions - Explains how convention provisions are implemented - Explains role of flag state in implementing provisions of maritime conventions - Explains role of port state in implementing provisions of maritime conventions 	4 hrs
		<p>8. Recommendations and state legislation</p> <ul style="list-style-type: none"> - Explains how recommendations differ from regulations - Describes the IMO guidelines on the mitigation of fatigue 	

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		<ul style="list-style-type: none"> - Describes the IMO principles of safe manning and the guidelines for their implementation - Gives examples of recommendations and state legislation dealing with human factors 		
Application of leadership and team working skills (cont)	<p>Ability to apply task and workload management, including:</p> <p>.1 planning and co-ordination</p> <p>Ability to apply task and workload management, including: (cont)</p>	<ul style="list-style-type: none"> - States what planning means with respect to individuals and groups - Describes how planning outcomes are measured - Describes the role of feedback with respect to planning outcomes - Defines coordination - Gives examples of shipboard coordination 	10 Hours	
	.2 personnel assignment	<ul style="list-style-type: none"> - States what personnel assignment means - Gives examples of personnel assignment on board 		
	.3 human limitations	<ul style="list-style-type: none"> - Describes common human limitations such as fatigue, misunderstanding, complacency - Describes onboard activities that test human limitations, including use of technology - Describes indicators that human limitations are being exceeded - Explains steps taken to avoid pushing crew members beyond personal limitations - Explains how hidden pressures can cause personal limitations to be exceeded - Describes the consequences of pushing a person beyond their personal limitations - Outlines STCW 2011 "Fitness for Duty" requirements 		
	.4 time and resource constraints	<ul style="list-style-type: none"> - States personal characteristics essential to effective leadership and teamwork on board - Describes own abilities contributing to leadership and teamwork on board - Describes how personal characteristics are managed and strengthened - Explains how to personally contribute to leadership and teamwork on board 		
	.5 personal abilities	<ul style="list-style-type: none"> - States personal characteristics essential to effective leadership and teamwork on board - Describes own abilities contributing to leadership and teamwork on board 		

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		<ul style="list-style-type: none"> - Describes how personal characteristics are managed and strengthened - Explains how to personally contribute to leadership and teamwork on board 	
Application of leadership and team working skills (cont)	Ability to apply task and workload management, including: .6 prioritization	<ul style="list-style-type: none"> - Gives examples of prioritization - Explains why prioritization is necessary 	
	.7 workloads, rest and fatigue	<ul style="list-style-type: none"> - Describes own shipboard workload - Explains the dangers of high workload - Explains the disadvantages of low workload - Describes how workload can be assessed - Describes how to ensure an appropriate workload - States the provisions for seafarers to get adequate rest - Describes recording of hours of rest - Describes signs of fatigue - Explains how fatigue can result in very serious consequences - Gives examples of fatigue management guidelines and regulations 	
	.8 management (leadership) styles	<ul style="list-style-type: none"> - Explains how leadership and management differ - Explains and gives examples of designated and functional leadership - States leadership qualities - Describes leadership techniques - Describes development of an effective leadership persona - Explains the need for a leader to "have an honest look at himself or herself" 	
	.9 challenges and responses	<ul style="list-style-type: none"> - Explains what is meant by a "challenge and response" environment - Explains why a challenge and response environment is not always appropriate - States when an authoritarian approach is justified - Describes "chain of command" 	
Application of leadership and team working skills (cont)	Knowledge and ability to apply effective resource management: .1 allocation, assignment, and prioritization of	<ul style="list-style-type: none"> - Outlines the resources to be managed aboard a ship at sea - Describes how use of resources is managed - Gives examples of shipboard resource allocation, assignment and prioritization 	10 Hours

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	resources		
	.2 effective communication on board and ashore	<ul style="list-style-type: none"> - Describes the essence of effective communication - States the main components of a communication system - States the barriers to effective communication - Describes four lines of communication - Describes effective communication techniques - Explains why closed loop communication is used when maneuvering the ship - Describes communication protocols commonly used at sea - Gives examples of internal and external communication - Explains how communication with people ashore may differ from communication on board - Explains what needs to be done to create a good communication climate 	
	.3 decisions reflect consideration of team experiences	<ul style="list-style-type: none"> - Describes how to get the best out of a team - Describes allocation of work based on competence - Explains that good teamwork and leadership are indivisible - Explains how a good leader can exploit a team dynamic 	
Application of leadership and team working skills (cont)	Knowledge and ability to apply effective resource management:		
	.4 assertiveness and leadership, including motivation	<ul style="list-style-type: none"> - Describes the leadership required of a junior watchkeeper - Explains why assertive leadership may not be effective - Describes how an individual or a team may be motivated and de-motivated 	
	.5 obtaining and maintaining situational awareness	<ul style="list-style-type: none"> - Gives examples of situation awareness while watchkeeping - Gives examples of lack of situation awareness while watchkeeping - Describes how modern electronic aids can lead to lack of situation awareness - Explains the dangerous link between fatigue and situation awareness 	
	.6 appraisal of work performance	<ul style="list-style-type: none"> - Describes how work performance can be appraised - States the benefits of effective work performance appraisal 	
	.7 short and long term strategies	<ul style="list-style-type: none"> - Defines strategy 	

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Application of leadership and team working skills (cont)		<ul style="list-style-type: none"> - Explains the role of short term strategies in effective on board resource management - Describes when the use of short term strategy is necessary - Explains the role of long term strategies in effective on board resource management 	
	Knowledge and ability to apply decision-making techniques: .1 situation and risk assessment .1 situation and risk assessment .2 identify and consider generated options .3 selecting course of action .4 evaluation of outcome effectiveness .5 decision making and problem solving techniques .6 authority and assertiveness	<ul style="list-style-type: none"> - Explains how a situation is assessed and gives an example - States key characteristics of situation assessment - Describes how situation awareness may be weakened - Defines risk - Describes the relationship between situation assessment and risk - Describes how risk may be assessed - Describes how risk may be managed - Explains the role of risk assessment in risk management - Describes the role of situation and risk assessment in decision making - Gives examples of consideration of options available - Describes how an option may be created - Describes the role of leadership in creating options - States obligation to identify most appropriate course of action - Describes considerations in identifying most appropriate course of action - Gives examples of outcomes of shipboard courses of action - Describes how the outcome of a course of action can be assessed - Describes possible follow-up actions once outcome is assessed - Gives examples and explains problem solving techniques - Explains the various forms of authority - Describes the form of authority found on board a ship - Gives meaning of assertiveness - Describes shipboard situations justifying greater assertiveness 	10 Hours

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	.7 judgement	<ul style="list-style-type: none"> - Gives meaning of judgement - Explains difference between "reality judgement" and "value judgement" - Gives example of use of judgement on board 	
Application of leadership and team working skills (cont)	Knowledge and ability to apply decision-making techniques: (cont) .8 emergency management	<ul style="list-style-type: none"> - Describes the most common shipboard emergencies - States leadership requirements when dealing with a shipboard emergency - Describes the preparations for dealing with a shipboard emergency 	
		Total No. of Hours	44 Hours

* discrepancy between course specifications and course map is intended for assessment