

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

Course Code	:	Mar Law
Course Descriptive Title	:	Maritime Law
Course Credits	:	4 units
Lecture Contact Hours per Week	:	4 hours
Laboratory Contact Hours per Week	:	0 hours
○ Prerequisite	:	None
Reference/s	:	<ul style="list-style-type: none"> ○ Table A-III/1 and A-III/2 Function: Controlling the Operation of the Ship and Care for Persons on Board ○ STCW'78 as amended ○ Maritime Labor Convention 2006 ○ Annex A of CMO No. 20, Series of 2015 (Curriculum Mapping for BSMarE)

Note I:

The content of these course specifications are a combination of competences from the operational and management level function 4 Controlling the operation of the ship and care for persons on board.

To maintain the structure of the STCW competence tables for easy reference the operational competences and KUP's are listed together followed by the management level competences and KUP's.

For the design of the Instructor Guide(s) it is advisable to group the similar subjects from operational and management level together.

Note II:

In designing the course program there is an option to transfer the legal subjects related to MARPOL and other environmental conventions and treaties to Marine Environmental Protection. This may reduce the possibility of redundancy.

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment	<p>1. Introduction to Maritime Law</p> <ul style="list-style-type: none"> - States that maritime law is based partly on generally accepted customary rules developed over many years and partly on statute law enacted by states - States that matters of safety, protection of the marine environment and conditions of employment are covered by statute law - States that the main sources of maritime law are international conventions - States that the adoption of international conventions and agreements is intended to provide uniform practice internationally - States that a convention is a treaty between the States which have agreed to be bound by it to apply the principles contained in the convention within their sphere of jurisdiction - States that, to implement a convention or other international agreement, a State must enact national legislation giving effect to and enforcing its provisions - States that recommendations which are not internationally binding may be implemented by a State for ships flying its flag - Lists the main originators of international conventions concerned with maritime law are: <ul style="list-style-type: none"> — International Maritime Organization (IMO) — International Labour Organization (ILO) — Comite Maritime International (CMI) — United Nations (UN) - Describes: <ul style="list-style-type: none"> — flag State jurisdiction — coastal State jurisdiction — port State jurisdiction - Describes main elements of relevant IMO Conventions, e.g. SOLAS, MARPOL and STCW - Explains the significance of the 'no more favourable treatment' clause in the SOLAS, MARPOL, STCW and ILO Minimum Standards in Merchant Ships Conventions - Distinguishes between private and public international law <ul style="list-style-type: none"> - Explains that public maritime law is enforced through: <ul style="list-style-type: none"> — surveys, inspection and certification — penal sanctions (fines, imprisonment) — administrative procedures (inspection of certificates and records, detention) - States that the operation of a ship is governed by the national laws and regulations of the flag State, including those laws and regulations giving effect to international conventions - States that differences of detail usually exist in the national laws of different states implementing the same convention - States that, when serving in a ship flying a foreign flag, it is essential that the master, chief 	3 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>mate and chief engineer familiarize themselves with the laws and regulations of the flag State</p> <ul style="list-style-type: none"> - States that, when in port, a ship must also comply with the appropriate laws and regulations of the port State <p>Describes the importance of keeping up to date with developments in new and amended</p>	
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p><u>Law of the Sea</u></p> <ul style="list-style-type: none"> - Demonstrates knowledge and understanding of: - Convention on Law of the Sea - Territorial Sea and the Contiguous Zone - International Straits - Exclusive Economic Zone and Continental Shelf - High Seas - Protection and Preservation of the Marine Environment 	5 Hours
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p><u>International Convention on Load Lines, 1966 (LL 1966), as amended</u></p> <ul style="list-style-type: none"> - States that no ship to which the Convention applies may proceed to sea on an international voyage unless it has been surveyed, marked and provided with an international Load Line Certificate (1966) or an international Load Line Exemption Certificate, if appropriate - Explains to which ships the Convention applies - Describes the duration of validity of an International Load Line Certificate (1966) - Explains the circumstances in which an International Load Line Certificate (1966) would be cancelled by the Administration - States the control to which ships holding an international Load Line Certificate (1966) are subject when in the ports of other Contracting Governments - Describes for the purposes of the Regulations concerning: <ul style="list-style-type: none"> - freeboard - freeboard deck - superstructure - Describes the position, dimensions and marking of: <ul style="list-style-type: none"> - the deck line - the Load Line Mark - lines to be used with the Load Line Mark - States that the circle lines and letters are to be painted in white or yellow on a dark ground 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
		<p>or in black on a light ground and that they should be permanently marked on the sides of the ship</p> <ul style="list-style-type: none"> - States that the international Load Line Certificate (1966) will not be delivered to a ship until the surveyor has certified that the marks are correctly and permanently indicated on the ship's sides - Describes the requirements concerning the provision of closing appliances for ventilators - States that means, permanently attached, should be provided for closing the openings of air pipes to ballast tanks and other tanks - Describes the provisions for the protection of the crew - States that deck cargo should be so stowed as to allow for the closing of openings giving access to crew's quarters, machinery space and other parts used in the necessary work of the ship 	
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>2. Code of safe Working Practices for Merchant Seamen</p> <ul style="list-style-type: none"> - Explains that this Code of Safe Working Practices or its equivalent is intended primarily for merchant seamen - Explains that there should always be an adequate number of copies to allow the Master, Safety Officer and any members of the Safety Committee to have their own, leaving at least one available for general reference - Explains that this Code is addressed to everyone on a ship regardless of rank or rating because the recommendations can be effective only if they are understood by all and if all cooperate in their implementation - Explains that the Code is arranged in sections which deal with broad areas of concern - States that the introduction gives the regulatory framework for health and safety on board ships and overall safety responsibilities under that framework - States that Section 1 is largely concerned with safety management and the statutory duties underlying the advice in the remainder of the Code. All working on board are required to be aware of these duties and of the principles governing the guidance on safe practice which they are required to follow - States that Section 2 begins with a chapter setting out the areas that should be covered in introducing a new recruit to the safety procedures on board. It goes on to explain what individuals can do to improve their personal health and safety - States that Section 3 is concerned with various working practices common to all ships - States that Section 4 covers safety for specialist ship operation - Outlines and describes the contents of the COSWP for merchant seaman - Describes safe working practices and personal shipboard safety including: 	4 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> — working aloft — working over the side — working in enclosed spaces — permit to work systems such as: <ul style="list-style-type: none"> — hot work permit — cold work permit — entry in enclosed space permit — working aloft permit — working overside permit — electrical isolation permit — line handling — lifting techniques and methods of preventing back injury — electrical safety — mechanical safety — chemical and biohazard safety — personal safety equipment — Describes the role of a safety officer — Explains the topics discussed in the safety committee meeting — Explains the importance of personal health and hygiene on board — Describes the use of: <ul style="list-style-type: none"> — portable O₂ analyzers — explosion meter — multi gas detectors — other portable gas measuring instruments 	
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p style="text-align: center;">3. International Convention for the Safety of Life at Sea, 1974 as amended (SOLAS)</p> <p>SOLAS – General Provisions</p> <ul style="list-style-type: none"> — States that unless expressly provided otherwise, the regulations apply only to ships engaged on international voyages — Defines 'international voyage' — Defines: <ul style="list-style-type: none"> — passenger — passenger ship — cargo ship — tanker 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> – age of a ship – Explains who may carry out surveys for the enforcement of the provisions of SOLAS – Describes the powers of a nominated surveyor – Describes the procedures which apply if the surveyor finds that the ship does not comply with the provisions or is in such a condition that it is not fit to proceed to sea without danger to the ship or to persons on board – Lists the surveys to which a passenger ship must be subjected – Describes the extent of the surveys of passenger ships – Describes the requirements for surveys of life – saving appliances and other equipment of cargo ships, including mandatory annual surveys – Describes the requirements for surveys of radio and radar installations of cargo ships – Describes the requirements for surveys of hull, and their extent, machinery and equipment of cargo ships, including mandatory annual surveys – Describes the extent of the surveys of hull, machinery and other equipment of cargo ships – States that the condition of the ship and its equipment must be maintained to conform with the provisions of the regulations – States that after any survey of a ship required by SOLAS, no change should be made in the structural arrangements, machinery, equipment or other items covered by the survey without the sanction of the Administration – States that any accident to a ship or defect affecting the safety of the ship or the efficiency or completeness of the life – saving appliances or equipment should be reported to the Administration or organization responsible for issuing the relevant certificate, who will decide whether a survey is required – Lists the surveys and their extent to which a passenger ship must be subjected – States that an accident or defect should also be immediately reported, by the master or owner, to the appropriate authorities of the port State when the ship is in a port of another Party to the SOLAS Convention – Lists the certificates, including attachments and supplements, where appropriate, issued after survey to ships satisfying the requirements of SOLAS – States the period of validity of each of the certificates – States that no Exemption Certificate is not valid for longer than the period of validity of the certificate to which it refers – States that no extension of the five – year period of validity of the Cargo Ship Safety Construction Certificate is permitted – Explains the circumstances under which other certificates may be extended and states the maximum extension permitted – Describes the circumstances in which certificates cease to be valid 	

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Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> - States that all certificates or certified copies of them should be posted up in a prominent and accessible place in the ship - States that certificates issued under the authority of a contracting Government should be accepted by other contracting Governments - States that a ship in the port of another Party is subject to control by officers authorized by that Government so far as verifying that the SOLAS Convention certificates are valid - Describes the procedures which may be followed by officers authorized by a port State in exercising control regarding SOLAS Convention Certificates or Load Line Convention Certificates - States that the surveyor should also take into account the requirements of SOLAS reg. V/13 that all ships should be sufficiently and efficiently manned - States that, at the conclusion of a control exercise the master should be provided with a document giving the results of the control exercise and details of any action taken - States that Parties to the Protocol of 1978 to the SOLAS Convention, 1974, should apply the requirements of the Convention and Protocol as may be necessary to ensure that no more favourable treatment is given to ships of non – parties to the Convention and Protocol 	
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>SOLAS – Subdivision and Stability, Machinery and Electrical Installation</p> <p>Defines, with reference to chapter II – 1:</p> <ul style="list-style-type: none"> - subdivision load line - deepest subdivision load line - length - breadth - draught - bulkhead deck - margin line - permeability of a space - machinery space - passenger spaces - watertight <ul style="list-style-type: none"> - Explains what is meant by 'floodable length' - Explains what is meant by 'factor of subdivision' - Explains the application of the factor of subdivision to a passenger ship's ability to withstand the flooding of adjacent main compartments - Describes the requirements regarding unsymmetrical flooding - States that the master should be supplied with suitable information concerning the use of 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>cross—flooding fittings</p> <ul style="list-style-type: none"> - Describes the final conditions of the ship after assumed critical damage - States that the master should be supplied with the data necessary to maintain sufficient intact stability under service conditions to enable the ship to withstand the critical damage - States that the conditions of stability on which the calculations of heel are based should be supplied to the master of the ship - States that excessive heeling might result should the ship sustain damage when in a less favourable condition - States that water ballast should not in general be carried in tanks intended for oil fuel and describes the arrangement for ships which cannot avoid putting water in oil fuel tanks - Describes the marking of subdivision load lines on passenger ships - States that details of the subdivision load lines assigned and the conditions of service for which they are approved should be clearly indicated on the Passenger Ship Safety Certificate - States that a ship should not be loaded so as to submerge the load line mark appropriate to the season and locality, as determined in accordance with the international Convention on Load Lines, whatever the position of the subdivision load line marks may be - States that a ship should not be loaded so as to submerge the subdivision load line mark appropriate to the particular voyage and condition of service classifies watertight doors as; <ul style="list-style-type: none"> - class 1 — hinged doors - class 2 — hand—operated sliding doors - class 3 — sliding doors which are power—operated as well as hand—operated - Describes the provisions regarding the fitting of watertight doors in passenger ships - States that watertight doors in bulkheads dividing cargo between deck spaces must be closed before the voyage commences and must be kept closed during navigation - States that the time of opening between—deck doors in port and the time of closing them before leaving port should be entered in the log—book - States that all watertight doors should be kept closed during navigation except when necessarily opened for the working of the ship, in which, case they should always be ready to be immediately closed - States that in passenger ships carrying goods vehicles and accompanying personnel indicators are required on the navigating bridge to show automatically when each door between cargo spaces is closed and all door fastenings are secured - States that side scuttles the sills of which are below the margin line, should be of such construction as will effectively prevent any person opening them without the consent of the master - States that certain side scuttles in between—deck spaces must be closed watertight and 	

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Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>locked before the ship leaves port and must not be opened before arrival at the next port</p> <ul style="list-style-type: none"> - Describes the requirements for dead lights - States that side scuttles and dead lights which will not be accessible during navigation must be closed and secured before the ship leaves port - States that the closing and locking of side scuttles and dead lights in spaces used alternatively for the carriage of passengers or cargo should be recorded in a log – book when carrying cargo - States the requirements for the closure of cargo loading doors in passenger ships - Describes the requirements for drills, operation and inspection of watertight doors and other openings in passenger ships - States that valves, doors and mechanisms should be suitably marked to ensure that they may be properly used to provide maximum safety - Lists the entries which should be made in the log – book regarding the opening and closing of doors, sidescuttles and other openings and the drills and inspections required by the regulations - States that every passenger ship and every cargo ship of 24 metres and upwards must be inclined upon its completion and the elements of its stability determined - States that the master should be supplied with such information as is necessary to obtain accurate guidance as to the stability of the ship under varying conditions of service - Describes the contents of damage control plans for passenger ships - States that booklets containing the damage control information should be made available to the ship's officers - Describes the recommendations on damage control for dry cargo ships - Describes the indicator system which must be provided on the navigating bridge of passenger ro – ro ships to show if shell doors, loading doors and other closing appliances are not fully closed or not secured - States the requirements for the detection of water leakage through shell doors or vehicle loading doors which could lead to major flooding of special category spaces or ro – ro cargo spaces - States the requirements for ro – ro cargo spaces to be monitored whilst the ship is under way 	
		<p>SOLAS – Fire Protection, Fire Detection and Fire Extinction</p> <ul style="list-style-type: none"> - Outlines the basic principles of the regulations on fire protection - Explains briefly the properties of class 'A' and class 'B' divisions - Defines: 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> – main vertical zones – accommodation spaces – public spaces – service spaces – cargo spaces – ro – ro cargo spaces, open and closed – special category spaces – machinery spaces of category A – control stations - States that fire hoses should be used only for the purposes of extinguishing fires or testing the apparatus at fire drills and surveys - Outlines the content of the SOLAS training manual and maintenance manual - Describes the information included in fire control plans or booklets - States that instructions concerning the maintenance and operation of all fire – fighting equipment and installations on board should be kept under one cover in an accessible position - States that a duplicate set of fire control plans or booklet should be permanently stored in a prominently marked weather tight enclosure outside the deckhouse for the assistance of shore side fire – fighting personnel - States that all fire – extinguishing appliances must be kept in good order and available for immediate use at all times during the voyage - States that passenger ships must at all times when at sea, or in port , be so manned or equipped that any initial fire alarm is immediately received by a responsible member of the crew - States that a special alarm, operated from the navigating bridge or from the fire control station, should be fitted to summon the crew and should be capable of being sounded independently of the alarm to the passenger spaces - States that an efficient patrol system must be maintained for ships carrying more than 36 passengers - Describes the training required by the fire patrol - States that there are special requirements for ships carrying dangerous goods - States that a ship should have a document provided by the Administration as evidence of compliance of construction and equipment with the requirements for the carriage of dangerous goods 	
		<p>SOLAS – Life – Saving Appliances and Arrangements</p> <ul style="list-style-type: none"> - Defines with reference to chapter III of SOLAS <ul style="list-style-type: none"> – certificated person 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> - float—free launching - inflatable appliance - inflated appliance - launching appliance or arrangement - rescue boat - survival craft - States that life—saving appliances and arrangements required by chapter III of SOLAS must be approved by the Administration - States the requirements for exhibiting muster lists - Describes the illustrations and instructions to be displayed in passenger cabins and other spaces - Lists the items to be included in muster lists and emergency instructions - Describes the provision of operating instructions for life—saving appliances - Explains how the crew should be assigned to survival craft to ensure satisfactory manning and supervision of survival craft - States that the person in charge of a survival craft should have a list of its crew and should see that they are acquainted with their duties - States the requirement, for the provision of training manuals - Lists the items which should be contained in the training manuals - Lists the items which should be contained in the maintenance manual - Describes the frequency of abandon ship drills and fire drills and how they should be conducted - Describes the guidelines for training crews for the purpose of launching lifeboats and rescue boats from ships making headway through the water - Describes the on—board training which should be given in the use of life—saving appliances and in survival at sea - Details the records which should be made of abandon ship drills and fire drills, other drills of life—saving appliances and on—board training - States that before leaving port and at all times during the voyage, all life—saving appliances must be in working order and ready for immediate use - Describes the instructions for on—board maintenance of life—saving appliances which should be carried - Describes the regulation regarding the maintenance of falls <ul style="list-style-type: none"> - Describes the weekly and monthly tests and inspections required and the entries which should be made in the log—book - Describes the requirements regarding the periodic servicing of inflatable liferafts, inflatable lifejackets, inflated rescue boats and hydrostatic release gear - Describes the requirements for passenger muster stations 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> - States that, on passenger ships, an abandon ship drill and a fire drill must take place weekly 	
		SOLAS – Carriage of Grain <ul style="list-style-type: none"> - Lists the intact stability requirements for a ship carrying bulk - Lists the contents of the grain loading information referred to in the document of authorization 	1 Hour
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	SOLAS – Carriage of Dangerous Goods <ul style="list-style-type: none"> - States that the regulations concerning the carriage of dangerous goods in packaged form or in solid bulk form apply to all ships to which the SOLAS regulations apply and to cargo ships of less than 500 gross tons - States that the provisions do not apply to ships' stores and equipment - States that the carriage of dangerous goods is prohibited except in accordance with the provisions of the regulations - States that the provisions should be supplemented by detailed instructions on safe packaging and stowage, which should include the precautions necessary in relations to other cargo, issued by each Contracting Government - Classifies dangerous goods according to the IMDG Code - States that the correct technical name of goods, and not trade names, should be used in all documents relating to the carriage of dangerous goods - States that the documents prepared by the shipper should include or be accompanied by a signed certificate or declaration that the shipment offered for carriage is properly packaged and marked and in proper condition for carriage - States the requirements for a special list or manifest of dangerous goods on board and their location or a detailed stowage plan showing the same information - Outlines the stowage requirements for dangerous goods - States that substances which are liable to spontaneous heating or combustion should not be carried unless adequate precautions have been taken to minimize the likelihood of the outbreak of fire - Lists the explosives which may be carried in a passenger ship - Defines: <ul style="list-style-type: none"> — International Bulk Chemical Code (IBC Code) — chemical tanker - States that the regulations apply to chemical tankers constructed on or after 1 July 1986, 	1 Hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
		<p>including those of less than 500 gross tons</p> <ul style="list-style-type: none"> - States that a chemical tanker must comply with the survey requirements for a cargo ship and, in addition, be surveyed and certified as provided for in the IBC Code - States that the IBC Code prescribes the design and construction standards of such ships, the equipment they should carry and marine pollution aspects - States that the requirements of the IBC Code are mandatory and subject to port State control - Defines: <ul style="list-style-type: none"> - International Gas Carrier Code (IGC Code) - gas carrier 	
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>The International Safety Management (ISM) Code</p> <p>States that a Safety Management System in compliance with the ISM Code must be in place on board all passenger ships and high speed craft, and all vessels of 500gt and upwards</p> <p>States that the details of the ship's system may be found in the ship's Safety Management Manual</p>	3 Hours
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<p>The International Ship and Port Facility Security Code (ISPS Code)</p> <ul style="list-style-type: none"> - Describes that the International Ship and Port Facility Security Code (ISPS Code) is a comprehensive set of measures to enhance the security of ships and port facilities, developed in response to the perceived threats to ships and port facilities in the wake of the 9/11 attacks in the United States - Explains that the ISPS Code is implemented through chapter XI-2 Special measures to enhance maritime security in the International Convention for the Safety of Life at Sea (SOLAS) - Explains that the Code has two parts, one mandatory and one recommendatory - Explains that the purpose of the Code is to provide a standardized, consistent framework for evaluating risk, enabling Governments to offset changes in threat with changes in vulnerability for ships and port facilities through determination of appropriate security levels and corresponding security measures - Explains that the ISPS Code is part of SOLAS so compliance is mandatory for the Contracting Parties to SOLAS - Explains that International Code for the Security of Ships and Port Facilities contains mandatory provisions to which reference is made in chapter XI-2 of the International Convention for the Safety of Life at Sea, 1974 as amended - Describes the objectives of the ISPS code 	1 hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> - Defines Ship security plan as a plan developed to ensure the application of measures on board the ship designed to protect persons on board, cargo, cargo transport units, ship's stores or the ship from the risks of a security incident - Defines Company security officer as the person designated by the Company for ensuring that a ship security assessment is carried out; that a ship security plan is developed, submitted for approval, and thereafter implemented and maintained and for liaison with port facility security officers and the ship security officer - Defines Security level 1 as the level for which minimum appropriate protective security measures shall be maintained at all times - Defines Security level 2 as the level for which appropriate additional protective security measures shall be maintained for a period of time as a result of heightened risk of a security incident - Defines Security level 3 as the level for which further specific protective security measures shall be maintained for a limited period of time when a security incident is probable or imminent, although it may not be possible to identify the specific target - Explains that a ship that is compliant to the ISPS code should have an International Ship Security Certificate (ISSC) - Explains that the Declaration of Security addresses the security requirements that could be shared between a port facility and a ship (or between ships) and shall state the responsibility for each - Explains that contracting Governments shall determine when a Declaration of Security is required by assessing the risk the ship/port interface or ship to ship activity poses to persons, property or the environment - Outlines that a ship can request completion of a Declaration of Security when: <ol style="list-style-type: none"> 1. the ship is operating at a higher security level than the port facility or another ship it is interfacing with; 2. there is an agreement on a Declaration of Security between Contracting Governments covering certain international voyages or specific ships on those voyages; 3. there has been a security threat or a security incident involving the ship or involving the port facility, as applicable; 4. the ship is at a port which is not required to have and implement an approved port facility security plan; or 5. the ship is conducting ship to ship activities with another ship not required to have and implement an approved ship security plan - Explains that the Declaration of Security shall be completed by: <ol style="list-style-type: none"> 1. the master or the ship security officer on behalf of the ship(s); and, if appropriate, 2. the port facility security officer or, if the Contracting Government determines otherwise, by any other body responsible for shore-side security, on behalf of the port facility - Explains that each ship shall carry on board a ship security plan approved by the Administration - Lists that the ship security plan addresses, at least, the following: 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ol style="list-style-type: none"> 1. measures designed to prevent weapons, dangerous substances and devices intended for use against persons, ships or ports and the carriage of which is not authorized from being taken on board the ship; 2. identification of the restricted areas and measures for the prevention of unauthorized access to them; 3. measures for the prevention of unauthorized access to the ship; 4. procedures for responding to security threats or breaches of security, including provisions for maintaining critical operations of the ship or ship/port interface; 5. procedures for responding to any security instructions Contracting Governments may give at security level 3; 6. procedures for evacuation in case of security threats or breaches of security; 7. duties of shipboard personnel assigned security responsibilities and of other shipboard personnel on security aspects; 8. procedures for auditing the security activities; 9. procedures for training, drills and exercises associated with the plan; 10. procedures for interfacing with port facility security activities; 11. procedures for the periodic review of the plan and for updating; 12. procedures for reporting security incidents; 13. identification of the ship security officer; 14. identification of the company security officer including 24-hour contact details; 15. procedures to ensure the inspection, testing, calibration, and maintenance of any security equipment provided on board; 16. frequency for testing or calibration of any security equipment provided on board; 17. identification of the locations where the ship security alert system activation points are provided; and 18. procedures, instructions and guidance on the use of the ship security alert system, including the testing, activation, deactivation and resetting and to limit false alert <ul style="list-style-type: none"> - Explains the role of Ship Security Alert System (SSAS) is to raise the alarm ashore in reaction to security threats or security incidents by notifying the flag State of the ship without alerting ships or coastal States in the vicinity or giving any indication on board - Explains that the use of the ship security alert system is a recognition that security is political and requires different response to a distress or emergency situation on board - Explains that Operation of AIS in certain sea areas would cause security concern because information broadcast through AIS could be collected by pirates or terrorists - Explains that because of this concern, the last Assembly adopted resolution A 956(23) ship masters are allowed to switch off the AIS in specific areas where threat of attack by pirates or terrorists are imminent 	
		International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended (STCW)	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor compliance with legislative requirements (cont)	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment (cont)	<ul style="list-style-type: none"> - Explain the relationship of STCW creation with respect to SOLAS - Discuss the history of amendments to the original STCW 1978 - Explains the general obligations under the Convention - Defines, for the purpose of the Convention: <ul style="list-style-type: none"> - Certificate of Competency - Certificate of Proficiency - certificated - seagoing ship - Explains the application of the Convention - Describes the issue of certificates and their endorsement by the issuing Administration - Describes the conditions under which dispensations may be granted - States that ships, when in a port of a party to the Convention, are subject to control to verify that all seafarers serving on board who are required to be certificated are so certificated or hold a valid dispensation - States that a ship which extends its voyage beyond what is defined as a near-coastal voyage by a Party must fulfill the requirements of the Convention without the relaxation allowed for near-coastal voyages - Describes the control which may be exercised by a duly authorized control officer - Describes the circumstances in which the control officer should supply written information to the master regarding deficiencies and the grounds under which the ship may be detained <p>Explains that the regulations contain:</p> <ul style="list-style-type: none"> - mandatory minimum requirements for the certification of masters, officers, radiotelephone operators, able seafarers deck or engine and ratings forming part of a navigational watch or an engineering watch - mandatory minimum requirements for the training and qualifications of masters, officers and ratings of oil, chemical and gas tankers - mandatory minimum requirements to ensure the continued proficiency and updating of masters and deck, engineer, and radio officers and ratings - basic principles to be observed in keeping navigational and engineering watches - mandatory minimum requirements for the issue of a Certificate of Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats 	
Monitor and control compliance with legislative requirements and measures to ensure	Knowledge of relevant international maritime law embodied in international agreements	<ul style="list-style-type: none"> - states that IMO publishes a list of certificates and documents required to be carried on board ship 	1 Hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
safety of life at sea, security and protection of the marine environment (ML)	<p>and conventions</p> <p>Regard shall be paid especially to the following subjects:</p> <p>.1 certificates and other documents required to be carried on board ships by international conventions, how they may be obtained and the period of their legal validity</p>	<ul style="list-style-type: none"> - states how a current version of the IMO list of certificates and documents required to be carried on board ship may be obtained - identifies the certificates required by MLC (2006) to be carried on board ship - identifies the certificates and documents that are required to be carried on board a ship of any type using the IMO information - states the period of validity for each of the above certificates and explains the requirements for renewing or maintaining the validity of each - explains how each of the certificates and documents required to be carried on board ships are obtained - explains the proof of validity that may be required by authorities for the certificates and documents above 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	<p>.2 responsibilities under the relevant requirements of the International Convention on Load Lines, 1966, as amended</p>	<ul style="list-style-type: none"> - States that a ship to which the Convention applies must comply with the requirements for that ship - Explains the general requirements of the Conditions of assignment to be met before any vessel can be assigned a loadline - Describes the factors that determine the freeboards assigned to a vessel - Describes the requirements and coverage of initial, renewal and annual surveys - Describes the contents of the record of particulars which should be supplied to the ship - Explains the documentation and records that must be maintained on the ship in terms of: <ul style="list-style-type: none"> o certificates o record of particulars o record of freeboards o information relating to the stability and loading of the ship - States that after any survey has been completed no change should be made in the structure, equipment or other matters covered by the survey without the sanction of the Administration - States that, after repairs or alterations, a ship should comply with at least the requirements previously applicable and that, after major repairs or alterations, ships should comply with the requirements for a new ship in so far as the Administration deems reasonable and practicable - Describes the preparation required for renewal and annual loadline surveys - States that the appropriate load lines on the sides of the ship corresponding to the season and to the zone or area in which the ship may be must not be submerged at any time when the ship puts to sea, during the voyage or on arrival - States that when a ship is in fresh water of unit density the appropriate load line may be submerged 	1 Hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
		<p>by the amount of the fresh water allowance shown on the International Load Line Certificate (1966)</p> <ul style="list-style-type: none"> - States that when a ship departs from port situated on a river or inland waters, deeper loading is permitted corresponding to the weight of fuel and all other materials required for consumption between the point of departure and the sea - Explains the treatment of a port lying on the boundary between two zones or areas - Explains the circumstances in which an International Load Line Certificate (1966) would be cancelled by the Administration 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.3 responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea, 1974, as amended	<ul style="list-style-type: none"> - States the obligations of the master of a ship at sea on receiving a signal from any source that a ship or aircraft or a survival craft thereof is in distress - Explains the rights of the master of a ship in distress to requisition one or more ships which have answered his call for assistance - Explains when the master of a ship is released from the obligation to render assistance - States that all equipment fitted in compliance with Reg V/12 must be of a type approved by the Administration - States that all ships should be sufficiently and efficiently manned - States that manning is subject to Port State Control inspection - Lists the contents of the minimum safe manning document referred to in Assembly resolution A481 (XII), Principles of Safe Manning - Describes the procedure for the testing of the ship's steering gear before departure - Describes the requirements for the display of operating instructions and change-over procedures for remote steering gear control and steering gear power units - Describes the requirements for emergency steering drills - Lists the entries which should be made in the log-book regarding the checks and tests of the steering gear and the holding of emergency drills - Explains the basic requirements for the carriage of dangerous goods in packaged form and IMDG Code - Explains the basic requirements for the carriage of dangerous goods in solid form in bulk 	1 Hour
	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended	<ul style="list-style-type: none"> - Explains who may cause proceedings to be taken when a violation occurs within the jurisdiction of a Party to the Convention - Explains the Parties to the Convention must apply the requirements of the Convention to ships of non-Parties to ensure that no more favourable treatment is given to such ships 	3 hours
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea,	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships,	<p>Annex I — Oil</p> <ul style="list-style-type: none"> - States that, after survey has been completed, no change should be made in the structure, equipment, fittings, arrangements or materials without the sanction of the Administration, except the direct replacement of equipment and fittings - Explains the masters duty to report when an accident occurs or a defect is discovered 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
security and protection of the marine environment (ML) (cont)	as amended (cont)	<p>which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex</p> <ul style="list-style-type: none"> - States that the dates of intermediate and annual surveys are endorsed on the IOPP Certificate - States that a record of construction and equipment is attached as a supplement to the IOPP Certificate - Explains the duration of validity of the IOPP Certificate and the circumstances in which the IOPP Certificate will cease to be valid - States that all new crude oil tankers of 20,000 tonnes deadweight and above must be fitted with a crude oil washing system - States that the competent authority of the Government of a Party to the Convention may inspect the Oil Record Book while the ship is in its port or offshore terminals and may make a copy of any entry and may require the master to certify that the copy is a true copy of such entry - States that a copy certified by the master is admissible in any judicial proceedings as evidence of the facts stated in the entry - States that the master should be provided with information relative to loading and distribution of cargo necessary to ensure compliance with the regulation on subdivision and stability and the ability of the ship to comply with the damage stability criteria - States all ships of 400gt or more must carry an approved shipboard oil pollution emergency plan (SOPEP) 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)	<p>Annex II — Noxious Liquid Substances in Bulk</p> <ul style="list-style-type: none"> - States the duration of validity of the certificate - Explains the nature and purpose of The International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code), the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) and the Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) - Explains that ships which have been surveyed and certified in accordance with the International Bulk Chemical Code (IBC Code) or the Bulk Chemical Code (BCH Code), as applicable, are deemed to have complied with the regulations regarding survey and certification and do not require to have an International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances in Bulk 	
		<p>Annex III — Harmful Substances Carried by Sea in Packaged Forms, or in Freight Containers, Portable Tanks or Tank Wagons</p> <ul style="list-style-type: none"> - States that the master of the ship, or his representative, should notify the appropriate port authority of the intention to load or unload certain harmful substances at least 24 hours in advance 	

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		<p>Annex IV — Sewage</p> <ul style="list-style-type: none"> - Defines, for the purposes of Annex IV: <ul style="list-style-type: none"> — holding tank, sewage and nearest land - States the ships to which the provisions apply - States that ships to which the regulations apply are subject to surveys for the issue of an International Sewage Pollution Prevention Certificate (1973) <p>States the duration of validity of the certificate</p>	
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)</p>	<p>Annex V — Garbage</p> <ul style="list-style-type: none"> - Explains that when garbage is mixed with other discharges having different disposal requirements, the more stringent requirements apply - Describes the provisions for disposal of garbage from off-shore platforms and from ships alongside or within 500 metres from them - Lists the special areas for the purposes of this annex - Explains the requirements for disposal of garbage within special areas - Describes the exceptions to regulations 3, 4 and 5 - Describes the form of record keeping required - States records are subject to scrutiny by port state control officers 	
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)</p>	<p>Annex VI — (Regulations for the Prevention of Air Pollution from Ships) of the MARPOL Convention</p> <ul style="list-style-type: none"> - States that MARPOL 73/78 Annex VI Regulations for the prevention of Air Pollution from ships entered into force on 19 May 2005 - States that MARPOL Annex VI sets limits on sulphur oxide and nitrogen oxide emissions from ship exhausts and prohibits deliberate emissions of ozone depleting substances - Explains that Annex VI emission control requirements are in accordance with the 1987 Montreal Protocol (a UN international environmental treaty), as amended in London in 1990 - States that MARPOL ANNEX VI applies to all ships, fixed and floating drilling rigs and other platforms, but the certification requirements are depending on size of the vessel and when it is constructed - Explains the requirements for shipboard energy efficiency plans under MARPOL ANNEX VI - Explains that Regulation 16 sets out requirements for shipboard incineration and as per 16(4) bans the incineration of: MARPOL Annex I, II and III cargo residues and related contaminated packing materials; <ul style="list-style-type: none"> — polychlorinated biphenyls (PCBs); — garbage, as defined in MARPOL Annex V, containing more than traces of heavy metals; and — refined petroleum products containing halogen compounds - Explains that under regulation 16(5) incineration of sewage sludge and sludge oil generated during the normal operation of a ship may take place in the main or auxiliary 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)</p>	<p>power plant or boilers (as well as in an incinerator), but in those cases, must not take place inside ports, harbours and estuaries</p> <ul style="list-style-type: none"> - Explains that Regulation 16(6) prohibits the shipboard incineration of polyvinyl chlorides (PVCs), except in incinerators for which IMO Type Approval Certificates have been issued - Explains that under regulation 16(7) all ships with incinerators subject to regulation 16 must possess a manufacturer's operating manual which must specify how to operate the incinerator within the limits described in paragraph 2 of appendix IV to Annex VI - Explains that under regulation 16(8) personnel responsible for operation of any incinerator must be trained and capable of implementing the guidance in the manufacturer's operating manual - Explains that Regulation 3 provides that the regulations of Annex VI will not apply to any emission necessary for the purpose of securing the safety of a ship or saving life at sea, or any emission resulting from damage to a ship or its equipment, subject to certain conditions - States that Regulation 15 provides that in ports or terminals in Party States any regulation of emissions of Volatile Organic Compounds (VOCs) from tankers must be in accordance with Annex VI - States that as per Regulation 15 a tanker carrying crude oil is required to have a —VOC Management Plan approved by the Administration onboard - States that ships of 400 gross tons and above engaged in international voyages involving countries that have ratified the conventions, or ships flying the flag of those countries, are required to have an International Air Pollution Prevention Certificate (IAPP Certificate) - States that the IAPP certificate will be issued following an initial survey carried out by the Flag Administration or by a recognized organization on behalf of the Flag Administration, confirming compliance with MARPOL Annex VI. For ships with the flag of an Administration that have not yet ratified Annex VI, a Certificate of Compliance with Annex VI may be issued - States that Annex VI also requires diesel engines with a power output of more than 130 kW which is installed on a ship constructed on or after 1 January 2000 or with a power output of more than 130 kW which undergoes a major conversion on or after 1 January 2000 or with a power output of more than 5000 kW and a per cylinder displacement at or above 90 litres which is installed on a ship constructed on or after 1 January 1990 but prior to 1 January 2000, to carry individual certificates with regard to NO_x emissions, named Engine International Air Pollution Prevention (EIAPP) Certificates - States that Annex VI requires that every ship of 400 gross tonnage or above and every fixed and floating drilling rig and other platforms shall be subject to a schedule of surveys that occur throughout the life of a vessel - States that the schedule of surveys include: <ul style="list-style-type: none"> — Initial survey: This survey occurs before the ship is put into service or before a vessel certificate is issued for the first time. This survey ensures that the equipment, systems, fitting, 	

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<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)</p>	<p>arrangements and material used onboard fully comply with the requirements of Annex VI. The vessel's International Air Pollution Prevention certificate (IAPP) will be issued to the vessel by an organization authorized to act on behalf of the state, after this survey</p> <ul style="list-style-type: none"> - Periodic surveys: These surveys occur at least every five years after the initial survey. These surveys confirm that nothing has been done to the ship's equipment that would take it out of compliance. The vessel's IAPP certificate will be re-issued by an organization authorized to act on behalf of the state, after this survey - Intermediate surveys: These surveys occur at least once during the period between issuance of an IAPP and the periodic surveys. They also confirm that all of the ship's equipment remains in compliance - States that Chapter III of Annex VI (regulations 12 to 19) contains requirements for control of emissions from ships, but the following regulations directly impact Vessel operation: <ul style="list-style-type: none"> - Regulation 12 - Ozone Depleting Substances - Regulation 13 - NO_x emissions - Regulation 14 - Sulphur Oxide emissions - Regulation 15 - VOC emissions - Regulation 16 - Shipboard Incinerators - Regulation 18 - Fuel Oil Quality control - States that Regulation 12(1) prohibits deliberate emissions of ozone-depleting substances, except <ul style="list-style-type: none"> - where necessary for the purpose of securing the safety of a ship or saving life, as provided in regulation 3 - States that Regulation 12(2) prohibits, on all ships, new installations containing ozone-depleting substances, except that new installations containing hydrochlorofluorocarbons (HCFCs) are permitted until 1 January 2020 - States that all the ships subject to the requirements of Annex VI, are required to maintain a list of equipment containing ozone depleting substances and in case a ship which has rechargeable systems containing ozone depleting substances, an Ozone depleting Substances Record Book is to be maintained on board - States that Regulation 13 sets NO_x emission limits for diesel engines with a power output of more than 130kW installed on ships built on or after 1 January 2000, and diesel engines of similar power undergoing a major conversion on or after 1 January 2000 - States that Regulation 13 does not apply to emergency diesel engines, engines installed in lifeboats and any device or equipment intended to be used solely in case of emergency, or engines installed on ships solely engaged in voyages within waters subject to the sovereignty or jurisdiction of the flag State, provided that such engines are subject to an alternative NO_x control measure established by the Administration - Explains that Regulation 13 further contains a 3-Tier approach; <ul style="list-style-type: none"> - Tier I 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)	<ul style="list-style-type: none"> - For diesel engines installed on ships constructed from 1 January 2000 to 1 January 2011 <ul style="list-style-type: none"> – Tier II (current limits) - For diesel engines installed on ships constructed on or after 1 January 2011 <ul style="list-style-type: none"> – Tier III - Ships constructed on or after 1 January 2016 - States that Engine surveys are described in Chapter 2 of the NO_x Technical Code, a supporting document to Annex VI - States that the four kinds of engine surveys are: <ul style="list-style-type: none"> – Pre-certification survey: This survey occurs before an engine is installed onboard a vessel, to ensure the engine meets the NO_x limits. The Engine International Air Pollution Prevention certificate (EIAPP) is issued after this survey for each applicable engine, engine family, or engine group – Initial certification survey: This survey occurs after the engine is installed onboard the ship, but before the ship is placed into service. It ensures that the engine meets the NO_x limits as installed. If an engine has an EIAPP, the initial certification survey will primarily ensure that any modifications to the engine's settings are within the allowable adjustment limits specified in the EIAPP – Periodic and intermediate surveys: These surveys occur as part of the ship's surveys described above. They ensure that the engine continues to comply fully with the NO_x limits <ul style="list-style-type: none"> – Modification survey: This survey occurs when an engine overhaul meets the criteria for a major conversion. It ensures that the modified engine complies with the NO_x limits - States that there are three documents that are essential for completing the engine and vessel surveys. These are the EIAPP or Statement of Compliance, the Technical File, and the Record Book of Engine Parameters - States that Regulation 14 provides for adoption of SO_x Emission Control Areas (SECA) where the adoption of special mandatory measures for SO_x emissions from ships is required to prevent, reduce and control air pollution from SO_x and its attendant adverse impacts on land and sea areas with more stringent control on sulphur emissions - States for the purpose of the regulation, Emission Control Areas (ECA) includes: <ul style="list-style-type: none"> – The Baltic Sea area as defined in regulation 1.11.2 of Annex I, the North Sea as defined in regulation 5(1)(f) of Annex V - States that in these areas the sulphur content of fuel oil used on ships must not exceed 1.5% m/m. Alternatively, ships in these areas must fit an exhaust gas cleaning system or use any other technological method to limit SO_x emissions - States that Regulation 15 provides that in ports or terminals in Party States any regulation of emissions of Volatile Organic Compounds (VOCs) from tankers must be in accordance with Annex VI - Explains that Regulation 16 sets out requirements for shipboard incineration and as per 16(4) bans the incineration of: 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)		

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended (cont)</p>	<ul style="list-style-type: none"> - MARPOL Annex I, II and III cargo residues and related contaminated packing materials; <ul style="list-style-type: none"> - polychlorinated biphenyls (PCBs); - garbage, as defined in MARPOL Annex V, containing more than traces of heavy metals; and - refined petroleum products containing halogen compounds - Explains that under regulation 16(5) incineration of sewage sludge and sludge oil generated during the normal operation of a ship may take place in the main or auxiliary power plant or boilers (as well as in an incinerator), but in those cases, must not take place inside ports, harbours and estuaries - Explains that Regulation 16(6) prohibits the shipboard incineration of polyvinyl chlorides (PVCs), except in incinerators for which IMO Type Approval Certificates have been issued - Explains that under regulation 16(7) all ships with incinerators subject to regulation 16 must possess a manufacturer's operating manual which must specify how to operate the incinerator within the limits described in paragraph 2 of appendix IV to Annex VI - Explains that under regulation 16(8) personnel responsible for operation of any incinerator must be trained and capable of implementing the guidance in the manufacturer's operating manual - States that as per Regulation 15 a tanker carrying crude oil is required to have a VOC Management Plan approved by the Administration onboard - Explains that Regulation 3 provides that the regulations of Annex VI will not apply to any emission necessary for the purpose of securing the safety of a ship or saving life at sea, or any emission resulting from damage to a ship or its equipment, subject to certain conditions 	
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.5 maritime declarations of health and the requirements of the International Health Regulations</p>	<p>Arrival Documents and Procedures</p> <p>International Health Regulations (1969) as amended (IHR)</p> <ul style="list-style-type: none"> - Defines for the purposes of these regulations: <ul style="list-style-type: none"> - arrival of a ship - baggage - container or freight container - crew - diseases subject to the Regulations - disinfecting - epidemic - free pratique - health administration - health authority - infected person in quarantine 	<p>1 Hour</p>

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.5 maritime declarations of health and the requirements of the International Health Regulations (cont)</p>	<ul style="list-style-type: none"> - international voyage - isolation - medical examination - ship - suspect - valid certificate - States that a health authority should, if requested, issue, free of charge to the carrier, a certificate specifying the measures applied to a ship or container, the parts treated, methods used and the reasons why they have been applied - States that, except in an emergency constituting a grave danger to public health, a ship which is not infected or suspected of being infected with a disease subject to the Regulations should not be refused free pratique on account of any other epidemic disease and should not be prevented from discharging or loading cargo or stores, or taking on fuel or water - States that a health authority may take all practicable measures to control the discharge from any ship of sewage and refuse which might contaminate the waters of a port, river or canal - Describes the measures which the health authority of a port may take with respect to departing travellers - States that no health measures should be applied by a State to any ship which passes through waters within its jurisdiction without calling at a port or on the coast - Describes the measures which may be applied to a ship which passes through a canal or waterway in a territory of a State on its way to a port in the territory of another State - States that, whenever possible, States should authorize granting of free pratique by radio - Explains that the master should make known to port authorities, as long as possible before arrival, any case of illness on board, in the interests of the patient and the health authorities and to facilitate clearance of the ship - States that, on arrival of a ship, an infected person may be removed and isolated and that such removal should be compulsory if required by the master - States that a ship should not be prevented for health reasons from calling at any port, but if the port is not equipped for applying the health measures which in the opinion of the health authority of the port are required, the ship may be ordered to proceed at its own risk to the nearest suitable port convenient to it - Explains the actions open to a ship which is unwilling to submit to the measures required by the health authority of a port - Describes the measures concerning cargo and goods - Describes the measures concerning baggage 	
		<p>Plague</p> <ul style="list-style-type: none"> - States that, for the purposes of the Regulations, the incubation period of plague is six days 	

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		<ul style="list-style-type: none"> - States that vaccination against plague should not be required as a condition of admission of any person to a territory - States that during the stay of a ship in a port infected by plague, special care should be taken to prevent the introduction of rodents on board - States that ships should be permanently kept free of rodents and the plague vector or be periodically derailed - Describes the requirements for the issue of a Ship Sanitation Control Certificate or a Ship Sanitation Control Exemption Certificate and states their periods of validity - States the conditions in which a ship on arrival is to be regarded as infected, suspected or healthy - Describes the measures which may be applied by a health authority on the arrival of an infected or suspected ship 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	5 maritime declarations of health and the requirements of the International Health Regulations (cont)	<p>Cholera</p> <ul style="list-style-type: none"> - Describes the measures which may be applied by a health authority on the arrival of a healthy ship from an infected area - States that, for the purposes of the Regulations, the incubation period of cholera is five days - Describes the measures to be taken by the health authority if a case of cholera is discovered upon arrival or a case has occurred on board 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.5 maritime declarations of health and the requirements of the International Health Regulations (cont)	<p>Yellow Fever</p> <ul style="list-style-type: none"> - States that, for the purposes of the Regulations, the incubation period of yellow fever is six days - States that vaccination against yellow fever may be required of any person leaving an infected area on an international voyage - States that every member of the crew of a ship using a port in an infected area must be in possession of a valid certificate of vaccination against yellow fever - States the conditions in which a ship on arrival is to be regarded as infected, suspected or healthy - Describes the measures which may be applied by a health authority on the arrival of an infected or suspected ship 	
		<p>Documents</p> <ul style="list-style-type: none"> - States that bills of health or any other certificates concerning health conditions of a port are not required from any ship - Describes the master's obligations concerning a Maritime Declaration of Health - States that the master and the ship's surgeon, if one is carried, must supply any 	

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		<p>information required by the health authority as to health conditions on board during the voyage</p> <ul style="list-style-type: none"> - States that no health document, other than those provided for in the Regulations, should be required in international traffic 	
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p>United Nations Convention on the Law of the Sea (UNCLOS)</p> <ul style="list-style-type: none"> - Explains that the outcome of UNCLOS III conference convened at Geneva in 1974 was the United Nations Convention on the Law of the Sea commonly known as UNCLOS - Explains that UNCLOS attempts to codify the international law of the sea - States that UNCLOS defines the legal status of the high seas and establishes regulations for the control of marine pollution - States that UNCLOS is a treaty document of 320 articles and 9 annexes, governing all aspects of ocean space, such as delimitation, environmental control, marine scientific research, economic and commercial activities, transfer of technology and the settlement of disputes relating to ocean matters - States that UNCLOS came into force internationally on 16 November 1994 - States that UNCLOS sets the width of the territorial sea at 12 nautical miles, with a contiguous zone at 24 nautical miles from the baseline - States that UNCLOS defines innocent passage through the territorial sea and defines transit passage through international straits - States that UNCLOS defines archipelagic States and allows for passage through archipelagic waters - States that UNCLOS establishes exclusive economic zones (EEZs) extending to 200 nautical miles from baselines - Explains that it defines the continental shelf and extends jurisdiction over the resources of the shelf beyond 200 miles where appropriate - Explains that states in dispute about their interpretation of UNCLOS may submit their disagreements to competent courts such as the International Court of Justice (in The Hague), or the Law of the Sea Tribunal (in Hamburg) - States that the responsibility for enforcement of regulations rests mainly with flag States, but as vessels enter zones closer to the coast the influence of coastal State jurisdiction and, ultimately, port State jurisdiction, gradually increases - States that Article 94 of the UNCLOS deals with duties of the flag State, while Article 217 deals with enforcement by flag States - States that Article 218 of the UNCLOS deals with port State jurisdiction - Explains when a vessel is voluntarily within a port or at an offshore terminal, the port State may, where the evidence warrants, begin proceedings in respect of discharges in violation of international rules (i.e. regulations in MARPOL 73/78) - States that another State in which a discharge violation has occurred, or the flag State, 	<p>1 hour</p>

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p>may request the port State to investigate the violation</p> <ul style="list-style-type: none"> - States that Article 200 of the UNCLOS deals with coastal State jurisdiction as applied in relation to pollution provisions - States that where there are clear grounds for believing that a vessel navigating in the territorial sea of a State has violated laws and regulations of the coastal State adopted in accordance with UNCLOS or applicable international pollution regulations, the coastal State may inspect the vessel and, where evidence warrants, institute proceedings including detention of the vessel - States that vessels believed to have violated pollution laws in an EEZ may be required to give identification and voyage information to the coastal State - Explains that as per UNCLOS, States must agree international rules and standards to prevent pollution from vessels (Article 211). (This obligation is currently met by MARPOL 73/78) - Explains that Coastal States may also promulgate and enforce pollution regulations in their own EEZs which may, in some circumstances, include imposition of routeing restrictions - States that in the territorial sea additional navigational restraints (e.g. traffic separation schemes and sea lanes) may be imposed on vessels with dangerous and hazardous cargoes - Explains that Coastal States and ports may make entry to internal waters and harbours conditional on meeting additional pollution regulations 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p>Maritime Labour Convention (MLC 2006)</p> <ul style="list-style-type: none"> - Explains that the Maritime Labour Convention, 2006 is an important new international labour Convention that was adopted by the International Labour Conference of the International Labour Organization (ILO), under article 19 of its Constitution at a maritime session in February 2006 in Geneva, Switzerland - Explains that it sets out seafarers' rights to decent conditions of work and helps to create conditions of fair competition for shipowners - Explains that it is intended to be globally applicable, easily understandable, readily updatable and uniformly enforced - Explains that the MLC, 2006, complementing other major international conventions, reflects international agreement on the minimum requirements for working and living conditions for seafarers - Explains that the Maritime Labour Convention, 2006 has two primary purposes: <ul style="list-style-type: none"> — to bring the system of protection contained in existing labour standards closer to the workers concerned, in a form consistent with the rapidly developing, globalized sector (ensuring decent work); — to improve the applicability of the system so that shipowners and governments interested in providing decent conditions of work do not have to bear an unequal 	6 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p style="text-align: center;">burden in ensuring protection (level playing field fair competition)</p> <ul style="list-style-type: none"> - Explains that the Maritime Labour Convention, 2006 has been designed to become a global legal instrument that, once it enters into force, will be the fourth pillar of the international regulatory regime for quality shipping, complementing the key Conventions of the International Maritime Organization (IMO) such as the International Convention for the Safety of Life at Sea, 1974, as amended (SOLAS), the International Convention on Standards of Training, Certification and Watchkeeping, 1978, as amended (STCW) and the International Convention for the Prevention of Pollution from Ships, 73/78 (MARPOL) - States that it sometimes called the consolidated Maritime Labour Convention, 2006 as it contains a comprehensive set of global standards, based on those that are already found in 68 maritime labour instruments (Conventions and Recommendations), adopted by the ILO since 1920 - States that the new Convention brings almost all of the existing maritime labour instruments together in a single new Convention that uses a new format with some updating, where necessary, to reflect modern conditions and language - Explains that the Convention —consolidates the existing international law on all these matters - States that the MLC, 2006 applies to all ships engaged in commercial activities (except fishing vessels, ships of traditional build and warships or naval auxiliaries) - States that ships of 500 GT or over are required to be certified: they must carry a Maritime Labour Certificate as well as a Declaration of Maritime Labour Compliance - States that ships below 500 GT are subject to inspection at intervals not exceeding three years - Explains that the existing ILO maritime labour Conventions will be gradually phased out as ILO Member States that have ratified those Conventions ratify the new Convention, but there will be a transitional period when some parallel Conventions will be in force - Explains that countries that ratify the Maritime Labour Convention, 2006 will no longer be bound by the existing Conventions when the new Convention comes into force for them - Explains that countries that do not ratify the new Convention will remain bound by the existing Conventions they have ratified, but those Conventions will be closed to further ratification - Describes that the Convention is organized into three main parts: the Articles coming first set out the broad principles and obligations which is followed by the more detailed Regulations and Code (with two parts: Parts A and B) provisions - States that the Regulations and the Standards (Part A) and Guidelines (Part B) in the Code are integrated and organized into general areas of concern under five Titles: <ul style="list-style-type: none"> – Title 1: Minimum requirements for seafarers to work on a ship: minimum age, medical certificates, training and qualification, recruitment and placement – Title 2: Conditions of employment: Seafarers Employment Agreements, Wages, 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p>Hours of Work and Hours of Rest, Entitlement to Leave, Repatriation, Seafarer compensation for the ship's Loss or Foundering, Manning Levels, Career and Skill Development and Opportunities for Seafarers' Employment</p> <ul style="list-style-type: none"> – Title 3: Accommodation, recreational facilities, food and catering – Title 4: Health protection, medical care, welfare and social security protection: Medical Care on-board ship and Ashore, Ship-owners' Liability, Health & Safety Protection and Accident Prevention, Access to Shore-based Welfare Facilities, Social Security – Title 5: Compliance and enforcement: <ul style="list-style-type: none"> - Flag State Responsibilities: General Principles, Authorization of Organizations, Maritime Labour Certificate and Declaration of Maritime Labour Compliance, Inspection and Enforcement, On-board Complaint Procedures, Marine Casualties - Port State Responsibilities: Inspections in Port, Detailed Inspection, Detentions, On-shore Seafarer Complaint Handling Procedures - Labour-supplying Responsibilities: Recruitment and Placement services, Social security provisions <p>These five Titles essentially cover the same subject matter as the existing 68 maritime labour instruments, updating them where necessary</p> <ul style="list-style-type: none"> - Explains that it occasionally contains new subjects in comparison to the existing ILO Maritime labour conventions, particularly in the area of occupational safety and health to meet current health concerns, such as the effects of noise and vibration on workers or other workplace risks - Explains that the standards in the new Convention are not lower than existing maritime labour standards as the aim is to maintain the standards in the current maritime labour Conventions at their present level, while leaving each country greater discretion in the formulation of their national laws establishing that level of protection - Explains that the advantages for ships of ratifying countries that provide decent conditions of work for their seafarers will have protection against unfair competition from substandard ships and will benefit from a system of certification, avoiding or reducing the likelihood of lengthy delays related to inspections in foreign ports - Explains that the Maritime Labour Convention, 2006 aims to establish a continuous compliance awareness at every stage, from the national systems of protection up to the international system and it will improve compliance and enforcement; - Starting with the individual seafarers, who - under the Convention - have to be properly informed of their rights and of the remedies available in case of alleged non-compliance with the requirements of the Convention and whose right to make complaints, both on board ship and ashore, is recognized in the Convention <ul style="list-style-type: none"> – It continues with the shipowners. Those that own or operate ships of 500 gross tonnage 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p>and above, engaged in international voyages or voyages between foreign ports, are required to develop and carry out plans for ensuring that the applicable national laws, regulations or other measures to implement the Convention are actually being complied with</p> <ul style="list-style-type: none"> – The masters of these ships are then responsible for carrying out the shipowners' stated plans, and for keeping proper records to evidence implementation of the requirements of the Convention – As part of its updated responsibilities for the labour inspections for ships above 500 gross tonnage that are engaged in international voyages or voyages between foreign ports, the flag State (or recognized organization on its behalf) will review the shipowners' plans and verify and certify that they are actually in place and being implemented – Ships will then be required to carry a maritime labour certificate and a declaration of maritime labour compliance on board – Flag States will also be expected to ensure that national laws and regulations implementing the Convention's standards are respected on smaller ships that are not covered by the certification system – Flag States will carry out periodic quality assessments of the effectiveness of their national systems of compliance, and their reports to the ILO under article 22 of the Constitution will need to provide information on their inspection and certification systems, including on their methods of quality assessment – This general inspection system in the flag State (which is founded on ILO Convention No. 178) is complemented by procedures to be followed in countries that are also or even primarily the source of the world's supply of seafarers, which will similarly be reporting under article 22 of the ILO Constitution <ul style="list-style-type: none"> - – The system is further reinforced by voluntary measures for inspections in foreign ports (port State control) - States that the appendices to the Convention contain key model documents: a maritime labour certificate and a declaration of maritime labour compliance - Explains that the Maritime Labour Certificate would be issued by the flag State to a ship that flies its flag, once the State (or a recognized organization that has been authorized to carry out the inspections), has verified that the labour conditions on the ship comply with national laws and regulations implementing the Convention - States that the certificate would be valid for five years subject to periodic inspections by the flag State - Explains that the declaration of maritime labour compliance is attached to the certificate and summarizes the national laws or regulations implementing an agreed-upon list of 14 areas of the maritime standards and setting out the shipowner's or operator's plan for ensuring that the national requirements implementing the Convention will be maintained on the ship between inspections - States that the lists of the 14 areas that must be certified by the flag State and that may be 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
		inspected, if an inspection occurs, in a foreign port are also set out in the Appendices to the Convention	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p><u>Assistance and Salvage</u></p> <p>International Convention on Salvage, 1989 (The London Salvage Convention)</p> <ul style="list-style-type: none"> - Defines “salvage operation”, “vessel” and “property” - Describes the no cure — no pay principle - Describes the application of the Convention - Describes the duties of the salvor, of the owner and of the master - Describes the rights of salvors - States the criteria for assessing a reward as: <ul style="list-style-type: none"> - salvaged value of property (ship, cargo and bunkers) <ul style="list-style-type: none"> - — skill and efforts of salvor - — measure of success - — nature and degree of danger - — expenses of salvor - — equipment used - — vessel’s equipment used - — time taken to complete the salvage operation - — preventing or minimising the damage to environment - States the criteria for assessing Special Compensation - Explains that the apportionment of the remuneration amongst the owners, master and other persons in the service of each salving vessel is to be determined by the law of the vessel’s flag - Explains that every agreement as to assistance or salvage entered into at the moment and under the influence of danger may, at the request of either party, be annulled, or modified by the court, if it considers that the conditions agreed upon are not equitable - States that no remuneration is due from persons whose lives are saved except as provided in national law - States that every master is bound, so far as he can do so without serious danger to his vessel, her crew and her passengers, to render assistance to everybody, even though an enemy, found at sea in danger of being lost <p>Explains the provision of security by the owner and the application of the salvor’s maritime</p>	1 Hour
		<p>Lloyd’s Standard Form of Salvage Agreement (LOF 2000)</p> <ul style="list-style-type: none"> - States that LOF 2000 should be used where the ship or marine environment are at risk and the master has insufficient time to request the owner to arrange salvage services on a the basis of a pre-agreed rate or sum 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	Special Compensation P and I Club (SCOPIC) Clause <ul style="list-style-type: none"> - Explains that SCOPIC clause is supplementary to any Lloyd's Form Salvage Agreement No Cure - No Pay (Main Agreement) which incorporates the provisions of Article 14 of the International Convention on Salvage 1989 (Article 14) - Explains that SCOPIC Clause determines the method of assessing special compensation where payable under Article 14(1) to 14(4) of the Convention 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	Convention on Limitation of Liability for Maritime Claims, 1976 (LLMC 1976) <ul style="list-style-type: none"> - Lists the persons entitled to limit liability - Lists the claims subject to limitation of liability - Lists the claims exempted from limitation - Explains the circumstances in which limitation would be barred - Explains that, except for claims in respect of death or injury of passengers, the calculation of limits of liability is based on the ship's gross tonnage - Explains that the limit for claims in respect of death or injury of passengers is based on the number of passengers the ship is authorized to carry, subject to a maximum sum - Describes the constitution of a limitation fund - States the scope of application of the Convention 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	Classification Societies <ul style="list-style-type: none"> - Explains the reasons for having a ship classed with a classification society - States that the majority of ships are built under survey - Explains that the classification society approves plans, examines the manufacture of parts and tests materials during the building of hull, machinery, equipment and, where appropriate, refrigerating machinery explains that equipment refers to anchors, chain cables, mooring ropes and wires, mooring arrangements, windlasses and mooring winches - States that, if requested, the classification societies will also survey and certificate cargo-handling equipment - States that on satisfactory completion of surveys and sea trials the society issues certificates of class, which are kept aboard ship, and enters the particulars of the ship in its register - States that a classification society will also survey an existing ship providing it meets the society's rules regarding scantlings, materials, workmanship and condition, assign a class to it - States that to retain its class a ship must undergo periodical surveys as laid down in the society's rules - Explains the nature and frequency of all surveys undertaken for classification purposes including machinery surveys - States that periodical surveys are: <ul style="list-style-type: none"> - annual survey 	2 Hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<ul style="list-style-type: none"> - — docking survey at approximately 2 yearly intervals - — intermediate survey - — special survey every 4 years, which may be extended to five years - Explains the special survey requirements may be met by a system of continuous survey such that the interval between successive surveys on any given item does not exceed 5 years - Explains the use of conditions of class and removal of classification - States that an occasional survey, additional to the regular surveys, must be conducted after any damage to the hull, machinery or equipment which may affect the ship's seaworthiness - States that repairs or alterations must be carried out under survey and to the satisfaction of the society's surveyors - States that classification societies carry out surveys for the issue of statutory certification on behalf of many governments - States that a classification society may be asked to conduct the loading port survey on its classed refrigerating machinery - Explains that, when convenient, the loading port survey may be combined with a periodical survey for classification 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p>General Average and Marine Insurance</p> <ul style="list-style-type: none"> - Defines a general average act - States that general average sacrifices and expenses are to be borne by the different contributing interests on the basis of these Rules - Explains that only such losses, damages or expenses which are the direct consequence of the general average act are allowed as general average and that no indirect loss whatsoever will be admitted - Explains in general terms the purpose of marine insurance - Explains what is meant by an insurable interest - Describes briefly how insurance is arranged through brokers - Explains the principle of 'utmost good faith' - Explains the effect of misrepresentation or non-disclosure of material circumstances known to the assured - Explains 'warranty' and the effect on a marine insurance policy of breach of warranty - Describes briefly voyage policies, time policies and floating policies - Describes briefly the perils usually covered in a marine insurance policy - Explains the use of 'Institute Clauses' - Explains the 'duty of assured' clause ('Sue and Labour' clause) - Explains the function of Protection and Indemnity Associations (P and I clubs) - Lists risks, liabilities and expenses covered by P and I clubs 	1 Hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p>Charter Parties</p> <ul style="list-style-type: none"> - Briefly explains the use of Charter parties in so far as these relate to the role of the management level engineering officer: <ul style="list-style-type: none"> Voyage charter Time charter Bareboat charter Laydays and cancelling date (Laycan) Notice of readiness (NOR) Demurrage Dispatch Delivery - On hire On hire survey Redelivery - Off hire Off hire survey 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<p><u>Ballast Water Convention 2004</u></p> <ul style="list-style-type: none"> - Defines the following: <ul style="list-style-type: none"> — ballast water — ballast water management — sediments - Describes the application of this convention - Describes the conditions where the application of this convention may be exempted - Describes the management and control requirement based on Section B Regulation B1 to B6 - Describes the Annex - Section A, B, C, D and E briefly - Describes the standards that need to be observed in ballast water exchange states under Regulation B-4 Ballast Water Exchange, all ships using ballast water exchange should: <ul style="list-style-type: none"> — Whenever possible, conduct ballast water exchange at least 200 nautical miles from the nearest land and in water at least 200 metres in depth, taking into account Guidelines developed by IMO; — In cases where the ship is unable to conduct ballast water exchange as above, this should be as far from the nearest land as possible, and in all cases at least 50 nautical miles from the nearest land and in water at least 200 metres in depth - States as per Annex - Section B Management and Control Requirements for Ships: <ul style="list-style-type: none"> — Ships are required to have on board and implement a Ballast Water Management Plan 	1 hour

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
		<p>approved by the Administration (Regulation B-1). The Ballast Water Management Plan is specific to each ship and includes a detailed description of the actions to be taken to implement the Ballast Water Management requirements and supplemental Ballast Water Management practices.</p> <ul style="list-style-type: none"> - Explains that in accordance with SOLAS Chapter V, Regulation 28 - Records of navigational activities and daily reporting, the commencement and termination of the operation should be recorded <p>Explains that the navigational records generated during ballast water exchange may be reviewed during ISM Audits and port state control inspections</p>	
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p><u>Port State Control</u></p> <ul style="list-style-type: none"> - Explains that Port State control is the inspection of foreign ships present in a nation's ports for the purpose of verifying that the condition of the ships and their equipment comply with the provisions of international conventions and codes, and that the ships are manned and operated in compliance with those provisions - Explains that the primary responsibility for maintaining ships' standards rests with their flag States, as well as their owners and masters. However, many flag States do not, for various reasons, fulfill their obligations under international maritime conventions, and port State control provides a useful —safety net to catch substandard ships. - States that a Port State Control regime, where set up under a memorandum of understanding (MOU) or similar accord between neighboring port States, is a system of harmonized inspection procedures designed to target substandard ships with the main objective being their eventual elimination from the region covered by the MOU's participating States - States that there are eight international PSC agreements currently in force world-wide - Identifies how to ascertain which port state agreement a particular port state might be party to and any areas of particular focus that may currently be in place - Outlines that in addition to the general control of above listed certificate and documents, examinations/inspections of the following are generally given priority by Port State Control Officer (PSCO): <ul style="list-style-type: none"> —Nautical publication (SOLAS 74 R V/20) —Navigational equipment (SOLAS 74 R V/12 and 19) —Emergency starting and running tests (SOLAS 74 R II-2 - 4.3) —Lifesaving equipment. Rafts FF (SOLAS 74 R III/20, 23, 26 and 29) —Emergency Generator (start/stop only) (SOLAS 74 R II-1/42&43) Hull corrosion and damages (Load Lines) (SOLAS 74 R I/11) —Main engine & aux. engines (SOLAS 74 R II/26, 27&28) —Oily water separator 15 ppm alarm (MARPOL Annex I/16(1)) 	<p>2 hours</p>

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<ul style="list-style-type: none"> – Oil discharge monitor (ODM) (MARPOL Annex I/16) – Charts corrected and proper scale (SOLAS 74 R V/20) – Fire safety Control plan (SOLAS 74 R II-2/20) – Ventilation inlets/outlets (SOLAS 74 R II-2/16.9&48) – Emergency training and drills (Log book rec. SOLAS 74 R III/18) – Emergency lighting/batteries (SOLAS 74 R II/42&43) – Deck- and hatches corrosion and damages (LL 1966) – Steering gear - incl. auxiliary & emergency (Bridge inspection only - SOLAS 74 R V/19) – Cleanliness in engine room (SOLAS 74 R II-1/26 and ILO 134) – Cleanliness in accommodation (ILO 92 & 133) - Explains that the Port State Control Inspections may be conducted on the following basis: <ul style="list-style-type: none"> - initiative of the Port State Administration; – the request of, or on the basis of, information regarding a ship provided by another Administration <ul style="list-style-type: none"> – information regarding a ship provided by a member of the crew, a professional body, an association, a trade union or any other individual with an interest in the safety of the ship, its crew and passengers, or the protection of the marine environment - Explains that the PSC inspections may be on random, targeted or periodical basis. The following types of PSC inspections are used in PSC: <ol style="list-style-type: none"> 1. Initial Inspection (random) 2. More detailed inspection (escalated) 3. Expanded inspection (targeted/periodical) - States that the definition of Inspection is: <ul style="list-style-type: none"> – A visit on board a ship to check both the validity of the relevant certificates and other documents, and the overall condition of the ship, its equipment, and its crew - Explains that the certificates and documents listed above should therefore be readily available and presented to the PSCO at his request during the PSC inspection - States that the definition of more detailed inspection is: <ul style="list-style-type: none"> – An inspection conducted when there are clear grounds for believing that the condition of the ship, its equipment, or its crew does not correspond substantially with the particulars of the certificates - States that the definition of Clear grounds is: <ul style="list-style-type: none"> – Evidence that the ship, its equipment, or its crew does not correspond substantially with the requirements of the relevant conventions or that the master or crew members are not familiar with essential shipboard procedures relating to the safety of ships or the prevention of pollution - Outlines that Clear grounds to conduct a more detailed inspection include: <ol style="list-style-type: none"> 1) the absence of principal equipment or arrangements required by the conventions; 2) evidence from a review of the ship's certificates that a certificate or certificates are clearly 	

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<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)</p>	<p>invalid;</p> <p>3)evidence that documentation required by the conventions are not on board, incomplete, are not maintained or are falsely maintained;</p> <p>4)evidence from the PSCO's general impressions and observations that serious hull or structural deterioration or deficiencies exist that may place at risk the structural, watertight or weather tight integrity of the ship;</p> <p>5)evidence from the PSCO's general impressions or observations that serious deficiencies exist in the safety, pollution prevention or navigational equipment;</p> <p>6)information or evidence that the master or crew is not familiar with essential shipboard operations relating to the safety of ships or the prevention of pollution, or that such operations have not been carried out;</p> <p>7)indications that key crew members may not be able to communicate with each other or with other persons on board;</p> <p>8)the emission of false distress alerts not followed by proper cancellation procedures;</p> <p>9)receipt of a report or complaint containing information that a ship appears to be substandard</p> <ul style="list-style-type: none"> - Explains that the PSCO during a more detailed inspection generally take the following into account: <ul style="list-style-type: none"> - structure; - machinery spaces; - conditions of assignment of load lines; - life-saving appliances; - fire safety; - regulations for preventing collisions at sea; - Cargo Ship Safety Construction Certificate; - Cargo Ship Safety Radio Certificates; - equipment in excess of convention or flag State requirements; - guidelines for discharge requirements under Annexes I and III of MARPOL 73/78 which includes: <ul style="list-style-type: none"> - inspection of crude oil washing (COW) operations; - inspection of unloading, stripping and prewash operations; - guidelines for control of operational requirements - which include: <ul style="list-style-type: none"> - muster list; - communication; - fire drills; - abandon ship drills; - damage control plan and Shipboard Oil Pollution Emergency Plan; - fire control plan; 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo (cont)	<ul style="list-style-type: none"> — bridge operation; — cargo operation; — operation of the machinery; — manuals, instructions etc.; — oil and oily mixtures from machinery spaces; — loading, unloading and cleaning procedures for cargo spaces of tankers; — dangerous goods and harmful substances in packaged form; — garbage; — minimum manning standards and certification; — STCW 78; — ISM; and — ISPS Code <ul style="list-style-type: none"> - States that expanded inspection is an inspection conducted according to non-mandatory guidelines only once during 12 months period for certain types of ships and certain categories of age and size Explains that Oil tankers, bulk carriers, gas and chemical carriers and passenger ships are subject to expanded inspections once during a period of 12 months - Outlines the IMO RESOLUTIONS pertaining to Port State Controls are as follows: <ul style="list-style-type: none"> — Res.321 Procedures for the control of ships 12/11/1975 — Res.466 Procedures of port state control 19/11/1981 — Res.597 Amendments to the procedures for the control of ships 19/11/1987 — Res.1052 Procedures for port state control 30/11/2011 - Explains that a record of port State control inspections including safety-related details of many ships is available on the internet from the Equasis database and may be viewed by any member of the public - Explains that Equasis forms part of the Quality Shipping campaign launched by the EU in 1997 which is formally supported by signatories from marine Administrations, classification societies, P&I clubs and the ITF Explains that more than 40 organisations provide information to Equasis and is used heavily by charterers and insurers as well as marine Administrations with port State control functions 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	.7 methods and aids to prevent pollution of the environment by ships	<u>Convention of the Prevention of Marine Pollution by Dumping of Wastes and Other Matter (London Dumping Convention) (LDC)</u> <ul style="list-style-type: none"> - Explains the aims of the Convention - Defines, for the purpose of the Convention: <ul style="list-style-type: none"> — dumping 	6 hours

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
<p>Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)</p>	<p>7 methods and aids to prevent pollution of the environment by ships (cont)</p>	<ul style="list-style-type: none"> - wastes or other matter - special permit - general permit - States that the dumping of wastes or other matter in whatever form or condition, as listed in annex I, is prohibited - States that the dumping of wastes or other matter listed in annex II requires a prior special permit - States that the dumping of all other wastes or mater requires a prior general permit - Explains that the provisions of Article IV do not apply when d is necessary to secure the safety of human life or of vessels in cases of ‘force majeure’ caused by stress of weather, or in any case which constitutes a danger to human life or a real threat to vessels - States that such dumping should be done so as to minimize the likelihood of damage to human or marine life and must be reported immediately - States that the Addendum to Annex I contains regulations on the incineration of wastes at sea - Explains that the appropriate authority of a Contracting Party should issue prior special or general permits in respect of matter intended for dumping: <ul style="list-style-type: none"> - loaded in its territory - loaded by a vessel flying its flag when the loading occurs in the territory of a State not party to the Convention <p><u>International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties, 1969</u></p> <ul style="list-style-type: none"> - describes the rights of Parties to the Convention to intervene on the high seas following a maritime casualty - defines, for the purposes of the Convention: <ul style="list-style-type: none"> - maritime casualty - ship - oil - related interests - describes the provisions which a coastal State should apply when exercising the right to take measures in accordance with Article I <p><u>Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973</u></p> <ul style="list-style-type: none"> - describes the rights of Parties to the Protocol to intervene on the high seas following a maritime casualty - defines ‘substances other than oil’ - explains that the Protocol extends the rights and obligations of coastal States to cases 	

COMPETENCE	KNOWLEDGE, UNDERSTANDING AND PROFICIENCY	PERFORMANCE	APPROX HOURS
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	7 methods and aids to prevent pollution of the environment by ships	<p>involving imminent threat</p> <p><u>International Convention on Civil Liability for Oil Pollution Damage, 1969 (CLC 1969)</u></p> <ul style="list-style-type: none"> - states that no claim for compensation may be made against the servants or agents of the owner - explains that, with certain exceptions, the owner may limit his liability by constituting a fund for the sum representing the limit of his liability with the Court of a Contracting States where the action is brought - states that claims in respect of expenses reasonably incurred by the owner voluntarily to prevent or minimize pollution damage rank equally with other claims against the fund - explains that where a fund has been constituted and the owner is entitled to limit his liability, no person having a claim for pollution damage resulting from that incident is entitled to exercise any rights over other assets of the owner and that the ship or any other property belonging to the owner should be released - states that the owner of a ship registered in a Contracting State and carrying more than 2,000 tons of oil in bulk as cargo is required to maintain insurance in the sum of his limit of liability - states that the appropriate authority of a Contracting State, after determining that the requirements have been, complied with, should issue a certificate attesting that insurance or other financial security is in force - states that the certificate should be carried on board ship and a copy deposited with the relevant authorities - states that a Contracting State must not permit a ship under its flag to which this Article applies to trade without a certificate - states that Contracting States must ensure under their national legislation, that insurance or other security is in force in respect of any ship, whenever registered, entering or leaving their ports of offshore terminals if the ship actually carries more than 2,000 tons of oil in bulk as cargo 	
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment (ML) (cont)	8 knowledge of national legislation for implementing international agreements and conventions	<ul style="list-style-type: none"> - explains the process by which international agreements and conventions are ratified and implemented into national legislation <p>Republic Act 8544 – the Philippine Merchant Marine Activity</p> <ul style="list-style-type: none"> – discuss how RA 8544 meets the international agreements and convention <p>Republic Act 10635 – creating a single maritime administration for the implementation of STCW as amended</p> <ul style="list-style-type: none"> – discuss how the CHED memorandum orders and STCW office of MARINA meet the international agreements and convention 	1 Hour 6 hours
		Total No. of Hours	64 Hours

* discrepancy between course specifications and course map total number of hours is allotted for assessment