## Part D

## **Instructor's Guide**

**Instructions:** The Instructor's Guide (I.G.) also known as lesson plan is developed by the instructor which serves as a road map of what the trainees need to learn and how it will be done effectively. The format below shall be used to ensure uniformity. However, the MTI is required to specify teaching and learning activities, and develop appropriate Instructional Materials suitable for the learning outcomes.

		<ul> <li>Competence: Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes</li> <li>Knowledge, Understanding and Proficiency: Knowledge of and ability to apply relevant international regulations, codes and standards concerning the safe handling, stowage, securing and transport of cargoes</li> </ul>			
No. of Train	ees: Twenty-Fo	ur (24) Trainees	Learning Outcome/s: At the er Refer to Part C Course Syllabus	nd of the session, the trainees	
Class Layou	<b>it:</b> Lay-out suitat	ole for theoretical part	Formative Assessment: Written	n Test	
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
30 minutes	Introduction	<ul> <li>Course Introduction</li> <li>Requirements under Regulation II/2, Section A-II/2 Function 2 of the STCW Convention and Code</li> <li>Training outcomes and course requirements</li> <li>Intended Learning Outcomes (ILOs)</li> </ul>	<ul> <li>Class orientation/ briefing</li> <li>Lecture/Discussion or other teaching methods suitable for theoretical aspect</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion.	Visual Presentation

Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
		<ul> <li>Introduction to leadership skill that a management level officer should possess</li> </ul>			
1 hour and 15 minutes	Core Element	1. International regulations, codes, and standards concerning the safe handling, stowage, securing and transport of cargoes	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to IMO/SOLAS, IMDG &amp; IMSBC CODES</li> </ul>
15 minutes	Conclusion	International regulations, codes, and standards concerning the safe handling, stowage, securing and transport of cargoes	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

Course: Management Level Course for Marine Deck Officers		<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes			
(Function 2)	lagement Level	Course for Marine Deck Onicers	Knowledge, Understanding and P and stability of cargoes and cargo of		the effect on trim
No. of Train	No. of Trainees: Twenty-Four (24) Trainees		Topic:         2. The effect on trim and stability of cargoes and cargo operations.         Learning Outcome/s:       At the end of the session, the trainees should be able to:         Refer to Part C Course Syllabus for the Intended Learning Outcomes		should be able to:
Class Layou	<b>it:</b> Lay-out suita	ble for theoretical part	Formative Assessment: Written Te		501105
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
30 minutes	Introduction	<ul> <li>International regulations, codes, and standards concerning the safe handling, stowage, securing and transport of cargoes</li> <li>Intended Learning Outcomes (ILOs)</li> </ul>	<ul> <li>Review of previous topics</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion.	Visual Presentation
1 hour and 45 minutes	Core Element	2. The effect on trim and stability of cargoes and cargo operations	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Trim and Stability</li> </ul>
15 minutes	Conclusion	The effect on trim and stability of cargoes and cargo operations	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

<b>Course:</b> Management Level Course for Marine Deck Officers		<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes			
(Function 2)	5		Knowledge, Understanding and onboard ships, including cargo-ha		
No. of Train	ees: Twenty-Fo	our (24) Trainees	Topic:3. Stowage and securing of cargLearning Outcome/s: At the end	d of the session, the trainees	
	-	ble for theoretical part	Refer to Part C Course Syllabus f Formative Assessment: Written		comes
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Introduction	<ul> <li>The effect on trim and stability of cargoes and cargo operations</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	3. Stowage and securing of cargoes on board ships	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to CSS Code, CSC Code</li> </ul>
15 minutes	Conclusion	Stowage and securing of cargoes on- board ship	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following:         <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

		<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes			
<b>Course:</b> Mar (Function 2)	<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)		<b>Knowledge, Understanding and Proficiency:</b> Loading and unloading operations, with special regard to the transport of cargoes identified in the Code of Safe Practice for Cargo Stowage and Securing		
			<b>Topic:</b> 4. Loading and unloading operat	ions	
No. of Train	ees: Twenty-Fo	our (24) Trainees	Learning Outcome/s: At the end Refer to Part C Course Syllabus f		
Class Layou	<b>it:</b> Lay-out suita	ble for theoretical part	Formative Assessment: Written	Test	
Time	Phase	Content	Instructor-lod Activity		Instructional Materials Used
15 minutes	Introduction	<ul> <li>Stowage and securing of cargoes on board ships</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	4. Loading and unloading operations	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to CSS Code</li> </ul>
15 minutes	Conclusion	Loading and unloading operations	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

Course: Management Level Course for Marine Deck Officers		<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes			
(Function 2)	lagement Level	Course for Marine Deck Onicers	Knowledge, Understanding and P tanker operations	roficiency: General knowle	edge of tankers and
			<b>Topic:</b> 5. General knowledge of tankers a	nd tanker operations	
No. of Train	ees: Twenty-Fo	our (24) Trainees	Learning Outcome/s: At the end on Refer to Part C Course Syllabus for		
Class Layou	it: Lay-out suita	ble for theoretical part	Formative Assessment: Written Te	est	
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Introduction	<ul> <li>Loading and unloading operations</li> <li>Intended learning outcomes</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	5. General knowledge of tankers and tanker operations	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Types and General Arrangements of Tankers</li> </ul>
15 minutes	Conclusion	General knowledge of tankers and tanker operations	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

<b>Course:</b> Management Level Course for Marine Deck Officers		<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes			
(Function 2)	lagement Lever	Course for Marine Deck Officers	Knowledge, Understanding and design limitations of bulk carriers	Proficiency: Knowledge	of the operational and
			<b>Topic:</b> 6. Operational and design limitat	ions of Bulk Carriers	
No. of Train	ees: Twenty-Fo	our (24) Trainees	Learning Outcome/s: At the end Refer to Part C Course Syllabus for		
Class Layou	It: Lay-out suital	ble for theoretical part	Formative Assessment: Written	Test	
Time	Phase	Content	Instructor-led Activity Trainee's Learning Activity		Instructional Materials Used
15 minutes	Introduction	<ul> <li>General knowledge of tankers and tanker operations</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	6. Operational and design limitations of bulk carriers	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to ISMBC Code, SOLAS Chapter XII</li> </ul>
15 minutes	Conclusion	Operational and design limitations of bulk carriers	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following:         <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

			<b>Competence:</b> Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes		
			Knowledge, Understanding and	Proficiency:	
<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)		<ul> <li>Ability to use all available shipboard data related to loading, care and unloading of bulk cargoes</li> <li>Use of stability and trim diagrams and stress-calculating equipment, including automatic data-based (ADB) equipment, and knowledge of loading cargoes and ballasting in order to keep hull stress within acceptable limits</li> <li>Topic:</li> <li>Shipboard data related to loading/unloading, and care of cargoes, and ballasting with the use of stability and trim diagrams and stress-calculating equipment</li> </ul>			
No. of Train	No. of Trainees: Twenty-Four (24) Trainees		<b>Learning Outcome/s:</b> At the end of the session, the trainees should be able to: Refer to Part C Course Syllabus for the Intended Learning Outcomes		
Class Layou	ut: Lay-out suital	ole for theoretical part	Formative Assessment: Written	and Practical Test	
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Introduction	<ul> <li>Operational and design limitations of bulk carriers</li> <li>Intended learning outcomes</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
2 hours	Core Element	7. Shipboard data related to loading/unloading, and care of cargoes, and ballasting with the use of stability and trim diagrams and stress-calculating equipment	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to SOLAS/ISMBC Code</li> </ul>

Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
4 hours	Core Element	<b>Practical Exercise 1</b> Create plans for safe loading/unloading and ballasting/de- ballasting operations of the following types of vessel, but not limited to: A4.1.1.Bulk Carrier; A4.1.2.Tanker Vessel; and A4.1.3.Container Vessel.	<b>Practical Exercise 1</b> The MTI is required to specify suitable activities for the conduct of the practical exercise in creating plans for the safe loading/unloading and ballasting/de-ballasting operations using stability and trim diagrams, and stress- calculating equipment of the following types of vessels, but not limited to bulk, tanker and container in given scenarios.	<b>Practical Exercise 1</b> Participating in the practical exercise on creating plans for the safe loading/unloading and ballasting/de-ballasting operations using stability and trim diagrams, and stress-calculating equipment of the following types of vessels, but not limited to bulk, tanker and container in given scenarios.	<ul> <li>Exercise Sheet A4.1.1-A4.1.3</li> <li>Computer sets with software capable of simulating cargo and stress calculations, and provide stability and trim diagrams of the following types of vessel, but not limited to: -bulk carrier; -tanker vessel; and -container vessel.</li> </ul>
15 minutes	Conclusion	Shipboard data related to loading/unloading, and care of cargoes, and ballasting with the use of stability and trim diagrams and stress- calculating equipment	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

			<ul> <li>Competence: Plan and ensure safe loading, stowage, securing, care during the voyage and unloading of cargoes</li> <li>Knowledge, Understanding and Proficiency: Ability to establish procedure for safe cargo handling in accordance with the provisions of the relevant instruments such as IMDG Code, IMSBC Code, MARPOL 73/78 Annexes III and V and other relevant information</li> </ul>		
	<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)				
			<b>Topic:</b> 8. Procedures on safe cargo handling		
No. of Traine	ees: Twenty-Fo	our (24) Trainees	Learning Outcome/s: At the end of the ses Refer to Part C Course Syllabus for the Inter		
Class Layou	It: Lay-out suita	ble for theoretical part	Formative Assessment: Written Test		
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Introduction	<ul> <li>Shipboard data related to loading, care and unloading of bulk cargoes</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	8. Safe cargo handling	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to IMDG Code IMSBC Code, MARPOL 73/78 Annexes III and V</li> </ul>
15 minutes	Conclusion	Safe cargo handling	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

			<b>Competence:</b> Plan and ensure safe load and unloading of cargoes	ling, stowage, securing, ca	re during the voyage
<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)		Course for Marine Deck Officers	<b>Knowledge, Understanding and Proficiency:</b> Ability to explain the basic principles for establishing effective communications and improving working relationship between ship and terminal personnel		
			<ul><li>Topic:</li><li>9. Effective communications and improvementations and improvementations</li></ul>	ring working relationship be	etween ship and
No. of Train	ees: Twenty-Fo	our (24) Trainees	<b>Learning Outcome/s:</b> At the end of the Refer to Part C Course Syllabus for the I		
Class Layou	ut: Lay-out suita	ble for theoretical part	Formative Assessment: Written Test		
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Introduction	<ul> <li>Safe cargo handling</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
30 minutes	Core Element	9. Effective communications and improving working relationship	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Trimming final cargo between terminal and ship</li> </ul>

Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
15 minutes	Conclusion	Effective communications and improving working relationship	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

Course: Management Lovel Course for Marine Deck Officers		Ocume for Marine Deals Officers	<b>Competence:</b> Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action			
<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)			<b>Knowledge, Understanding and Proficiency:</b> Knowledge of the limitations on strength of the vital constructional parts of a standard bulk carrier and ability to interpret given figures for bending moments and shear forces			
			<b>Topic:</b> <b>10.</b> Limitation on strength of the vital constructional parts of a standard bulk carrier			
No. of Trainees: Twenty-Four (24) Trainees		ur (24) Trainees	<b>Learning Outcome/s:</b> At the end of the session, the trainees should be able to: Refer to Part C Course Syllabus for the Intended Learning Outcomes			
Class Layou	Class Layout: Lay-out suitable for theoretical part		Formative Assessment: Written Test			
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used	
15 minutes	Introduction	<ul> <li>Effective communications and improving working relationship</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation	
1 hour	Core Element	10. Limitation on strength of the vital constructional parts of a standard bulk carrier	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Shear force and bending moment uniform load</li> </ul>	
15 minutes	Conclusion	Limitation on strength of the vital constructional parts of a standard bulk carrier	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation	

<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)		<b>Competence:</b> Assess reported defects and damage to cargo spaces, hatch covers and ballast tanks and take appropriate action				
		<b>Knowledge, Understanding and Proficiency:</b> Ability to explain how to avoid the detrimental effects on bulk carrier of corrosion, fatigue and inadequate cargo handling				
			Topic:			
			<b>11.</b> Detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling			
No. of Trainees: Twenty-Four (24) Trainees		<b>Learning Outcome/s:</b> At the end of the session, the trainees should be able to: Refer to Part C Course Syllabus for the Intended Learning Outcomes				
Class Layout: Lay-out suitable for theoretical part		Formative Assessment: Written and Practical Test				
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used	
15 minutes	Introduction	<ul> <li>Limitation on strength of the vital constructional parts of a standard bulk carrier</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation	
40 minutes	Core Element	11. Detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Maintenance of hatch covers, cargo holds and ballast tanks</li> </ul>	

Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used
2 hours and 30 minutes	Core Element	<b>Practical Exercise 2</b> Develop strategies, to include risk assessment, to avoid the detrimental effects of corrosion, fatigue, and inadequate cargo handling on bulk carriers	<b>Practical Exercise 2</b> The MTI is required to specify suitable activities for the conduct of the practical exercise in developing strategies, to include risk assessment, to prevent the detrimental effects of corrosion, fatigue, and inadequate cargo handling on bulk carriers in accordance with the Planned Maintenance System (PMS).	<b>Practical Exercise 2</b> Participating in the practical exercise on developing strategies, to include risk assessment, to prevent the detrimental effects of corrosion, fatigue, and inadequate cargo handling on bulk carriers in accordance with the Planned Maintenance System (PMS).	<ul> <li>Visual Presentation</li> <li>Risk Assessment Form</li> <li>Exercise Sheet A4.2</li> </ul>
5 minutes	Conclusion	Detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation

<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)			Competence: Carriage of dangerous goods         Knowledge, Understanding and Proficiency:         International regulations, standards, codes and recommendations on the carriage of         dangerous cargoes, including the International Maritime Dangerous Goods (IMDG)         Code and the International Maritime Solid Bulk Cargoes (IMSBC) Code         Topic:         12. International regulations, standards, codes and recommendations on the         carriage of dangerous cargoes         Learning Outcome/s: At the end of the session, the trainees should be able to:         Refer to Part C Course Syllabus for the Intended Learning Outcomes         Formative Assessment: Written Test					
						No. of Trainees: Twenty-Four (24) Trainees Class Layout: Lay-out suitable for theoretical part		
								Time
15 minutes	Introduction	<ul> <li>Detrimental effects on bulk carriers of corrosion, fatigue and inadequate cargo handling</li> <li>Intended learning outcome</li> </ul>				<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation
1 hour and 30 minutes	Core Element	12. International regulations, standards, codes and recommendations on the carriage of dangerous cargoes				The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to SDS, IMDG &amp; IMSBC codes</li> </ul>
15 minutes	Conclusion	International regulations, standards, codes and recommendations on the carriage of dangerous cargoes	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation			

<b>Course:</b> Management Level Course for Marine Deck Officers (Function 2)			Competence: Carriage of dangerous goods Knowledge, Understanding and Proficiency: Carriage of dangerous, hazardous and harmful cargoes; precautions during loading and unloading and care during the voyage			
No. of Train	No. of Trainees: Twenty-Four (24) Trainees Class Layout: Lay-out suitable for theoretical part		<b>Learning Outcome/s:</b> At the end of the session, the trainees should be able to: Refer to Part C Course Syllabus for the Intended Learning Outcomes			
Class Layou			Formative Assessment: Written	Test		
Time	Phase	Content	Instructor-led Activity	Trainee's Learning Activity	Instructional Materials Used	
15 minutes	Introduction	<ul> <li>International regulations, standards, codes and recommendations on the carriage of dangerous cargoes</li> <li>Intended learning outcome</li> </ul>	<ul> <li>Review of previous lessons</li> <li>Presentation of the ILOs or other activities to motivate the trainees</li> </ul>	Listening, note taking, inquiring, answering questions, interactive discussion	Visual Presentation	
30 minutes	Core Element	13. Carriage of dangerous, hazardous and harmful cargoes	The MTI is required to specify suitable activities for the delivery of the topic.	The MTI is required to specify suitable learning activities.	<ul> <li>Visual Presentation</li> <li>Video related to Shipping dangerous goods</li> </ul>	
15 minutes	Conclusion	Carriage of dangerous, hazardous and harmful cargoes	<ul> <li>Make generalization and abstraction of the lesson</li> <li>Assess the learning which may come from any of the following: <ul> <li>Formative Test</li> <li>Oral Examination</li> <li>Assignment</li> </ul> </li> <li>Other activities to check the retention of learning</li> </ul>	<ul> <li>Participating, sharing insights and learning gained</li> <li>Answering/asking questions</li> </ul>	Visual Presentation	