Course Description Form

Basic Course Specifications					
Course Title	:	**Operative Cargo Handling & Stowage**			
Course Code	:	**TI 352**			
Program on which the course is given	:	❒ **Bachelor**	❒ **Diploma**	☐ **Master**	☐**Pre- PhD**
Academic year	:	**2015/2016**			
Specialization (units of study)	:	Application : 180 Hrs. (Credit :3H)			
Pre-Requisites	:	BS 214 & BS 235			

Overall Course Objectives

This syllabus covers the requirements of the STCW 78 Convention, as amended (Manila 2010) Chapter II, Section A-II/1. This function element provides the detailed knowledge to support the training outcomes related to Cargo Handling and Stowage at the operational level. The students should be able to:

- Monitor the loading, Stowage and unloading of cargoes and their care during the voyage.
- Inspect and report defects and damage to cargo spaces, hatch covers and ballast tanks.

Intended Learning Outcomes

Knowledge and Understanding

The student should be able to:
a.1 Realize care and maintenance of cargo handling equipment.
a.2 Describe how to make preparation and inspection of holds.
a.3 Explain the need for segregation and separation of different cargoes.
a.4 Demonstrate the use of cargo handling safety criteria.
a.5 Describe the types of ventilation and the ventilation rules.
a.6 State the cargoes that carried on deck and how to stow and secure it.
a.7 Describe types and sizes of container in use and determine his position.
a.8 List potentially dangerous spaces and state precautions before entering enclosed or contaminated spaces.

Intellectual Skills

By the end of the program the students should have acquired the following concepts :
b.1 Taking a quick, appropriate, and accurate decision if required.
b.2 Distinguish between bale capacity and grain capacity and determine wen to use each one of them.
b.3 Be able to deal with different crews from different countries with different attitudes and background
b.4 Describe the arrangement of a container ship and explain how the position of a particular container is designated.
b.5 Use IMDG code for segregation and separation process.

Professional and Practical skills

The student should be able to:
c.1 Read load line and draught.
c.2 Calculate mean draught and trim and determine the approximate weight loaded or discharged.
c.3 Measure density of the water.
c.4 The student should be existed during the preparation and inspection of some holds.
c.5 The student should be existed during the usage of cargo handling equipment in loading and discharging of cargo.
c.7 Know the types of ventilation existed on his vessel.
c.7 Stow and secure container on deck.
c.8 Execute the regulations of check list before entering enclosed or contaminated spaces.
c.9 Calculate the amount of cargo to be loaded in a specific hold.
c.10 Measure ballast water tanks and fresh water tanks and calculate the weight of ballast water in

a specific tank.
General and Transferable skills
At the end of the course, students should be able to: **d.1**Handle with IMO references. **d.2**Deal with stability booklet for any vessel. **d.3**Deal with cargo handling equipment

	Course content			
WK. #	**Topic**	**Hrs#**	**Theoretical**	**Practical**
1	Load Line and Reading Draught	9		9
2	Draught	9		9
3	Trim	9		9
4	Cargo Handling equipment	9		9
5	Cargo Handling equipment	9		9
6	Inspection and preparation of Holds	9		9
7	Assessment	9		9
8	Segregation and separation of cargo	9		9
9	Cargo Handling Safety	9		9
10	ventilation and control of sweat	9		9
11	Deck Cargo	9		9
12	Assessment	9		9
13	Deck Cargo	9		9
14	Container cargo	9		9
15	Container cargo	9		9
16	Precautions before entering enclosed or contaminated spaces	9		9
17	Precautions before entering enclosed or contaminated spaces	9		9
18	Cargo calculations	9		9
19	Ballast Water Tank Calibration Tables	9		9
20	Final Assessment	9		9

Teaching & learning methods				
Practical Work , Group Work , Individual Study, Demonstration, Lecture				
Facilities required for Teaching & learning methods				
❒ **Computer Lab**	❒ **Overhead Slide**	❒ **Guided Sea Training work Book**	❒ **Deck equipment**	❒ **Port equipment**

Students Assessment Methods	
Assessment Submission Schedule	
Assessment#1: Written and Oral examination	Post voyage 2
Assessment#2: Written and Oral examination	Post voyage 4
Assessment#3 : Written and Practical examination	During Final Training voyage

Grading Method		
Attendance		**None**
Practical watch evaluation	❒	**Continuous 30 Marks**
Presentations		**None**
Practical Assignments	❒	**20 Marks**
Projects		**None**
Participation		**None**
Oral Examination	❒	**10 Marks**
Final Examination	❒	**40 Marks**
		Total 100%
*Assessment criteria shall meet the standards of the STCW 78 convention "as amended""; and in the light of the related IMO model courses		

List of References		
Course Notes		
Description	:	• Guided Sea Training Book (Part 1)
Essential Books		
Description	:	• Ship Stability for Masters and Mates ,seventh edition • Cargo Work ,captain L. G Taylor • Seamanship techniques , third edition
IMO		
Description	:	• International Convention on Standards of Training, Certification and Watch keeping for Seafarers(STCW),1978, as amended • International Convention for The Safety of Life at Sea (SOLAS),2009 • International Convention on Load Lines,1966 • Assembly resolution A.715(15)- Code of Safe Practice for Ships Carrying Timber Deck Cargoes • Assembly resolution A.288(VIII)- Recommendation on the Safe Stowage and Securing of Containers on Deck
Periodicals and publications		
Description	:	• Stability book • Tank Sounding Table
Others (websites, e-books…etc)		
Description	:	• www.imo.org