

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT3028
Subject Title	General Ship Management
Credit Value	3
Level	3
Normal Duration	1-semester
Pre-requisite	Nil
Objectives	<ol style="list-style-type: none"> 1. This subject will provide students a full knowledge of controlling the operation of ship and care for persons on board at the operational level, with emphasis on basic concepts concerning ship structure, its construction and maintenance, as well as ship stability. It also provides the students with fundamental principles of safe cargo handling and stowage for ship operation. 2. To provide adequate professionally-related skills and knowledge to the students enabling them to make readily contribution on general ship knowledge to the organization which employ them. To provide also a foundation for their future professional development, thus meeting the BBA Program Learning Outcomes.
Subject Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. Maintain seaworthiness of a ship in particular actions to ensure and maintain the watertight integrity of a ship and stability conditions that complies with IMO intact stability criteria under all conditions of loading; b. Manage and execute cargo operations of a ship in accordance with the cargo plan and shipboard procedures; and c. Understand the international safety regulations, recognized standards and codes of safe practice on shipboard cargo handling and ship maintenance & survey.
Subject Synopsis/ Indicative Syllabus	Principal components of ship's structure, their functions, their presentation in ship drawings; Stability criteria; Hull form coefficients; Displacement, Deadweight, Lightweight; Curves and tables of displacement and TPC; Load line markings; Density; Relative density, Archimedes principle; Flotation; Effects of density of water on draught and freeboard; FWA; DWA; Buoyancy; Reserve buoyancy; Partial loss of intact buoyancy; Transverse stability; Righting lever and moment; Knowledge of cargo handling equipment and safe cargo handling, Stowage and securing including solid bulk cargoes; Dangerous, hazardous and harmful cargoes and their effect on safety of life and the ship; Definitions of various terms used in the carriage of goods such as

	bale capacity, grain capacity, stowage factors, broken stowage; Types of hatch covers in general use and their safe operation; The safe operations and stowage of containers, bulk, deck and liquid cargoes; International and classification society requirements of structures; Ship maintenance & drydock planning survey preparation.							
Teaching/Learning Methodology	In the lectures, the general principle of the above mentioned topics will be presented and developed. During the tutorial and laboratory sessions, students will learn to develop and apply the general principle of these topics under simulation, as well as other student-centered activities.							
Assessment Methods in Alignment with Intended Learning Outcomes	Specific assessment methods/tasks		% weighting		Intended subject learning outcomes to be assessed (Please tick as appropriate)			
			a	b	c			
	Coursework	60%	✓	✓	✓			
	Examination	40%	✓	✓	✓			
	Total	100 %						
Assessment of Intended Learning Outcomes: Means of assessment on coursework and examination are suitably employed to assess students' understanding of the legal and practical issues in the subject areas.								
Student Study Effort Expected	Class contact:							
	▪ Lecture							26 Hrs.
	▪ Tutorial / Laboratory							13 Hrs.
	Other student study effort:							
	▪ Self Study							81 Hrs.
	▪ Visits to ships / piers							6 Hrs.
	Total student study effort							126 Hrs.
Reading List and References	<p><u>Essential</u></p> <p>Bruce, G. & Eyres, D (2012), <i>Ship Construction</i>, 7th Ed, Butterworth Heinemann</p> <p>Captain D.R. Derrett (2012), revised by Dr C.B. Barrass, <i>Ship Stability for Masters and Mates</i>, Butterworth Heinemann</p> <p>Danton, G. (1996), <i>The Theory and Practice of Seamanship</i>, 11th edition, London: Routledge.</p>							

	<p>D Vassalos (2000), <i>Contemporary ideas on ship stability</i>, 1st edition, Amsterdam, New York : Elsevier</p> <p>David House (2015), <i>Cargo Work : For Maritime Operations</i>, Routledge 2016 Eighth edition</p> <p><u>Supplementary</u></p> <p>The IMDG Code and its supplement, latest edition</p>
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