

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT4011
Subject Title	Port Planning and Management
Credit Value	3
Level	4
Normal Duration	1-semester
Pre-requisite / Co-requisite/ Exclusion	Nil
Objectives	This subject introduces students to the principles and practices of port operations. It provides students with a comprehensive knowledge of the nature of port, its development, and its management. It also introduces students to the roles and functions of ports in the economic and transport infrastructure of a territory.
Subject Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. Solve managerial and technical problems in operating a port; b. Support the continuous development and enhancement of port; c. Evaluate port development plans; d. Recommend necessary port facilities and equipment; e. Develop, coordinate, manage and control emergencies in port; <p>Studying this subject will also help develop students' skills in critical and creative thinking, problem solving, teamwork and communication. It helps develop their ability in pursuing life-long learning. It also helps strengthen their sense of responsibility in ensuring sustainable development of port.</p>
Subject Synopsis/ Indicative Syllabus	Role of ports in economic development and in the through transport concept; road/rail impact on port/hinterland relationships; geography and locational analysis; port administration and free ports; demand analysis; capacity evaluation; productivity enhancement; Environmental Impact Assessment; investment appraisal; information needs for port planning; investment criteria; investment analysis and financing; port authority liabilities, legal liability under national and international law; management and organization; port marketing; the rise of global terminal operators; cargo handling and transfer technology; labour management in ports; planning for emergencies and disasters; port and the environment.
Teaching/Learning Methodology	Lectures will be used to present the basic theories and their application to the real world. General principles of the syllabus topic will be presented and developed during the lectures.

	In the tutorial classes, students will develop and apply the general principles of the topic in student-centred activities, including group discussions of cases, student presentations and discussions.							
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	d	e	
	Continuous Assessment		50%		✓	✓	✓	
	Final Examination		50%	✓	✓		✓	✓
	Total		100 %					
<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>The continuous assessment includes participation in class discussions and/or short quizzes (10%) for stimulation of interactive learning among students and/or verification of basic knowledge when facilitated by the prevalent learning & teaching mode, punctual attendance (5%), short assignment (10%) for assessing students' skills in critical and creative thinking on individual basis, and a minigroup project with report & presentation (25%) for assessing students' teamwork and communication skills within a group, in addition to facilitating them to apply theoretical knowledge into practice. Examination is to test students' basic theoretical knowledge and abilities to solve problems.</p>								
Student Study Effort Expected	Class contact:							
	▪ Lectures							26 Hrs.
	▪ Tutorials							13 Hrs.
	Other student study effort:							
	▪ Revisions							67 Hrs.
	▪ Course project and presentation							20 Hrs.
	Total student study effort							126 Hrs.
Reading List and References	<p><u>Essential</u></p> <p>Bichou K. (2019): <i>Port Operations, Planning and Logistics</i>, Informa</p> <p>Burns M. G. (2015): <i>Port Management and Operations</i>, CRC Press</p> <p>Cahoon, S. (2007): 'Marketing communications for seaports: a matter of survival and growth'. <i>Maritime Policy & Management</i> 34(2): 151-168.</p> <p>Christopher, K., Fflm, S. (2015): <i>Port Security Management</i>. Boca Raton: CRC Press, https://doi.org/10.1201/b17142</p>							

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- Heaver, T.D. (1995): 'The implications of increased competition among ports for port policy and management'. *Maritime Policy & Management* 22(2): 125-133.
- Ng, A.K.Y. (2009): *Port Competition: The Case of North Europe*. VDM Verlag, Saarbrücken.
- Ng, A.K.Y. (2011): 'Global ports and logistics facilitation'. In: Liu, J.J. (Ed.): *Supply Chain and Transport Logistics*. Routledge, London, pp. 398-415.
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- Ng, A.K.Y. and Song, S. (2010): 'The environmental impacts of pollutants generated by routine shipping operations on ports'. *Ocean and Coastal Management* 53(5-6): 301-311.
- Notteboom, T. (Ed.) (2011): *Current Issues in Shipping, Ports and Logistics*. UPA, Antwerp.
- OECD (2011): *Environmental Impacts of International Shipping: The Role of Ports*. OECD Publishing. <https://dx.doi.org/10.1787/9789264097339-en>
- Sanchez, R.J., Ng, A.K.Y. and Garcia-Alonso, L. (2011): 'Port selection factors and attractiveness: the service suppliers' perspective'. *Transportation Journal* 50(2): 141-161.
- Song D.W., Cullinane, K. and Roe, M. (2001): *The Productive Efficiency of Container Terminals: An Application to Korea and the UK*. Aldershot: Ashgate.
- Supplementary/Indicative**
- Bichou, K., Bell, M.G.H. and Evans, A. (Eds.) (2007): *Risk Management in Port Operations, Logistics and Supply Chain Security*. LLP, London.
- GHD (2013): *Environmental Best Practice Port Development: An Analysis of International Approaches*. Department of Sustainability, Environment, Water, Population and Communities, Canberra, Australia. PTI (2020): *Smart Digital Ports - A Market Analysis for 2020*. Port Technology International. <https://www.porttechnology.org/news/pti-releases-smart-digital-ports-analysis-2020/>
- Rodrigue, J.P., Slack, B. and Notteboom, T. (Eds.) (2017): *The Geography of Transport Systems*. New York: Routledge.
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- Talley, W.K. (Ed.) (2008): *Maritime Safety, Security and Piracy*. LLP, London.
- Talley, W.K. (Ed.) (2011): *Maritime Economics: A Blackwell Companion*. Blackwell, Hoboken, NJ.
- Wang, J.J. and Ng, A.K.Y. (2011): 'The geographical connectedness of Chinese seaports with foreland markets: a new trend?' *Tijdschrift voor Economische en Sociale Geografie* 102(2): 188-204.
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