

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	<p>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.</p>
Intended Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> Solve managerial and technical problems in operating a port; Support the continuous development and enhancement of port; Evaluate port development plans; Recommend necessary port facilities and equipment; 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	<p>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.</p>
Teaching/Learning Methodology	<p>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.</p>

	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 %						
Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes: 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 mini-group 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.								
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	<u>Essential</u>							
	Bichou K. (latest edition): <i>Port Operations, Planning and Logistics</i> , Informa							
	Notteboom, T., Pallis, A., & Rodrigue, J.-P. (2022). <i>Port Economics, Management and Policy</i> (1st ed.). Routledge. https://doi.org/10.4324/9780429318184							
	Burns M. G. (2015): <i>Port Management and Operations</i> , CRC Press							
	Cahoon, S. (2007): 'Marketing communications for seaports: a matter of survival and growth'. <i>Maritime Policy & Management</i> 34(2): 151-168.							
Christopher, K., Fflm, S. (2015): <i>Port Security Management</i> . Boca Raton: CRC Press, https://doi.org/10.1201/b17142								

	<p>Fleming, D.K. and Hayuth, Y. (1994): 'Spatial characteristics of transportation hubs: centrality and intermediacy'. <i>Journal of Transport Geography</i> 2(1): 3-18.</p> <p>Heaver, T.D. (1995): 'The implications of increased competition among ports for port policy and management'. <i>Maritime Policy & Management</i> 22(2): 125-133.</p> <p>Ng, A.K.Y. (2009): <i>Port Competition: The Case of North Europe</i>. VDM Verlag, Saarbrücken.</p> <p>Ng, A.K.Y. (2011): 'Global ports and logistics facilitation'. In: Liu, J.J. (Ed.): <i>Supply Chain and Transport Logistics</i>. Routledge, London, pp. 398-415.</p> <p>Ng, A.K.Y. and Pallis, A.A. (2010): 'Port governance reforms in diversified institutional frameworks: generic solutions, implementation asymmetries'. <i>Environment and Planning A</i> 42(9): 2147-2167.</p> <p>Ng, A.K.Y. and Song, S. (2010): 'The environmental impacts of pollutants generated by routine shipping operations on ports'. <i>Ocean and Coastal Management</i> 53(5-6): 301-311.</p> <p>Notteboom, T. (Ed.) (2011): <i>Current Issues in Shipping, Ports and Logistics</i>. UPA, Antwerp.</p> <p>OECD (2011): <i>Environmental Impacts of International Shipping: The Role of Ports</i>. OECD Publishing. https://dx.doi.org/10.1787/9789264097339-en</p> <p>Sanchez, R.J., Ng, A.K.Y. and Garcia-Alonso, L. (2011): 'Port selection factors and attractiveness: the service suppliers' perspective'. <i>Transportation Journal</i> 50(2): 141-161.</p> <p>Song D.W., Cullinane, K. and Roe, M. (2001): <i>The Productive Efficiency of Container Terminals: An Application to Korea and the UK</i>. Aldershot: Ashgate.</p> <p><u>Supplementary/Indicative</u></p> <p>Bichou, K., Bell, M.G.H. and Evans, A. (Eds.) (2007): <i>Risk Management in Port Operations, Logistics and Supply Chain Security</i>. LLP, London.</p> <p>GHD (2013): <i>Environmental Best Practice Port Development: An Analysis of International Approaches</i>. Department of Sustainability, Environment, Water, Population and Communities, Canberra, Australia. PTI (2020): <i>Smart Digital Ports - A Market Analysis for 2020</i>. Port Technology International. https://www.porttechnology.org/news/pti-releases-smart-digital-ports-analysis-2020/</p> <p>Rodrigue, J.P., Slack, B. and Notteboom, T. (Eds.) (2017): <i>The Geography of Transport Systems</i>. New York: Routledge.</p> <p>Sanchez, R.J., Hoffman, J., Micco, A., Pizzolitto, G.V., Sgut, M. and Wilmsmeier, G. (2003): 'Port efficiency and international trade: port efficiency as a determinant of maritime transport costs'. <i>Maritime Economics & Logistics</i> 5: 199-218.</p> <p>Talley, W.K. (Ed.) (2008): <i>Maritime Safety, Security and Piracy</i>. LLP, London.</p> <p>Talley, W.K. (Ed.) (2011): <i>Maritime Economics: A Blackwell Companion</i>. Blackwell, Hoboken, NJ.</p> <p>Wang, J.J. and Ng, A.K.Y. (2011): 'The geographical connectedness of Chinese seaports with foreland markets: a new trend?' <i>Tijdschrift voor Economische en Sociale Geografie</i> 102(2): 188-204.</p> <p>Wang, J.J., Ng, A.K.Y. and Olivier, D. (2004): 'Port governance in China: a review of policies in an era of internationalising port management practices'. <i>Transport Policy</i> 11(3): 237-250.</p> <p>News, Port Technology International, https://www.porttechnology.org/port-news/</p>
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