

The Hong Kong Polytechnic University

Subject Description Form

Subject Offering Department	Department of Logistics and Maritime Studies
Subject Code	LGT2B02
Subject Title	Principles of Operations Management
GUR Requirements	<input checked="" type="checkbox"/> Cluster Area Requirement (CAR) <input type="checkbox"/> Human Nature, Relations and Development <input checked="" type="checkbox"/> Community, Organization and Globalization <input type="checkbox"/> History, Cultures and World Views <input type="checkbox"/> Science, Technology and Environment <input type="checkbox"/> Freshman Seminar <input type="checkbox"/> Healthy Lifestyle <input type="checkbox"/> Leadership & Intra-personal Development (LIPD) <input type="checkbox"/> Languages and Communication Requirement (LCR) <input type="checkbox"/> Service-Learning
Reading/Writing Requirements in English/Chinese	<input type="checkbox"/> China-Study Requirement (CSR) More than 60% CSR-related content <input type="checkbox"/> Eligible for “English Writing” (EW) designation include an extensive piece of writing (2,500 words) <input type="checkbox"/> Eligible for “Chinese Writing” (CW) designation include an extensive piece of writing (3,000 characters) <input type="checkbox"/> Eligible for “English Reading” (ER) designation include a reading of an extensive text (100,000 words or 200 pages) <input type="checkbox"/> Eligible for “Chinese Reading” (CR) designation include a reading of an extensive text (100,000 characters or 200 pages) <input checked="" type="checkbox"/> None
Medium of Instruction	English
Credit Value	3
Level	2
Normal Duration	1-semester
Exclusion	LGT2106 Principles of Operations Management
Role and Purposes	Operations Management (OM) is a functional field of management encompassing the design, operation and improvement of the processes and systems employed in the creation and delivery of an organization's products and services.
Subject Learning Outcomes	Upon completion of the subject, students will be able to: (a) Distinguish the main principles of operations management.

	<p>(b) Demonstrate how service and manufacturing operations create the value in the processes.</p> <p>(c) Recognize the key techniques and concepts that exist within operations management.</p> <p>(d) Apply the various models and approaches of operations management to inform decision making in a real business situation.</p>
<p>Subject Synopsis/ Indicative Syllabus</p>	<p>Introduction Defining operations management. Relationship of business operations processes with other functions. Managerial roles and skills in the operations function.</p> <p>Designing operations systems and processes Process management, managing projects, managing information technology, Enterprise Resource Planning (ERP) systems,</p> <p>Managing quality Quality characteristics. Quality control. Quality assurance. Total quality management. Quality costs. Statistical quality control</p> <p>Managing capacity Economies and diseconomies of scale, Capacity planning. Aggregate planning. Capacity requirement planning. Master production schedule.</p> <p>Facility planning Facility location. Layout of the facility. Processes design for service providers and manufacturers.</p> <p>Demand management Forecasting, qualitative forecasting, quantitative forecasting, forecasting accuracy.</p> <p>Operations scheduling Scheduling jobs on one machine and two machines. Scheduling workers in service operations.</p> <p>Managing the future challenges Lean production systems, Just-in-time concepts, Kanban system, lean systems in services.</p>
<p>Teaching/Learning Methodology</p>	<p>Lectures are designed to provide a basic grounding in principles, concepts and techniques in operations management, and to provide a basis for further analysis and application of the techniques in organizations.</p> <p>Tutorials provide the environment and means for student-centered learning, in the form of class discussions, case analyses, group and individual work, designed to stimulate original and creative thinking, and the capacity to apply the tools and techniques to the solution of operations problems.</p>

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
	Continuous Assessment	50%				
	Class participation – 5%		✓	✓	✓	✓
	Quizzes – 10%		✓	✓		✓
	Case report – 15%		✓			✓
	Midterm quiz – 20%		✓	✓		✓
	Final exam	50%	✓	✓	✓	✓
Total	100 %					
<p><i>To pass this subject, students are required to obtain Grade D or above in <u>BOTH</u> the Continuous Assessment and Examination components.</i></p> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Assessment of coursework includes class participation, case report, quizzes and tests. The quizzes, tests and final exam will cover all topics in the syllabus, with a focus of testing students’ understanding on the concepts of operations management, key techniques of operations management strategies on achieving the firm’s organization goals. The case report will assess the students’ analytical skill on evaluating the business performance of a firm with its operations management practices. The class participation is assessed to ensure students actively participate in class discussion for promoting more interactive learning environment.</p>						
Student Study Effort Expected	Class contact:					
	Lectures		26 Hrs.			
	Tutorials		13 Hrs.			
	Other student study effort:					
	Preparation for discussion		45 Hrs.			
	Preparation for project/ assignments/ Exams		42 Hrs.			
	Total student study effort		126 Hrs.			
Reading List and References	<p><u>Recommended Textbooks</u></p> <p>Chase, R. B., and Jacobs, F. R., (2017), Operations and supply chain management (15th ed.), McGraw-Hill.</p>					

Jacobs, F. R., and Chase, R. B., (2016), Operations and Supply Management: The Core (4th ed.), McGraw-Hill.

Heizer, J., Render, B. & Munson, C. (2016), Operations Management: Sustainability and Supply Chain Management (12th ed.), Pearson/Prentice Hall.

Useful Reference

Krajewski, L. J., Malhotra, M. K., Ritzman, L. P., (2015), Operations management: processes and supply chains (11th ed.), Pearson/Prentice

Hall.Schroeder, R. G., Rungtusanatham, M. J., Goldstein, S. M., (2017), Operations management in the supply chain: decisions and cases (7th ed.), McGraw-Hill.

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