

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT5033
Subject Title	Lean Thinking and Practice
Credit Value	3
Level	5
Normal Duration	1-semester
Pre-requisite / Co-requisite/ Exclusion	Nil
Role and Purposes	<ul style="list-style-type: none"> ▪ To provide students with a strategic overview of lean thinking philosophy and concepts. ▪ To enable the students to critically review the principles of lean thinking. ▪ To introduce students to the tools and techniques involved in identifying opportunities for ‘leaning’ operations and supply chain management activities in order to enhance competitive advantage. ▪ To equip students the technics to manage lean data <p>This subject contributes to the following Intended Learning Outcomes for the following programme(s):</p> <p>MSc in Management (Operations Management)</p> <p>#2: Develop the specific operations management knowledge</p>
Subject Learning Outcomes	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. Able to employ lean thinking concepts as a strategy to eliminate waste and improve organizational performance. b. Able to apply lean concepts and tools to identify improvement areas and generate solutions in order to improve operational efficiency. c. Able to undertake an efficiency improvement project with lean thinking concepts and tools, and present the project proposal professionally. d. Able to perform lean data management
Subject Synopsis/ Indicative Syllabus	<ul style="list-style-type: none"> ▪ Philosophy and evolution of lean thinking ▪ Lean principles: <ul style="list-style-type: none"> • Value • Value stream • Flow • Pull • Perfection

	<ul style="list-style-type: none"> ▪ Lean techniques <ul style="list-style-type: none"> • Value identification techniques • Value stream mapping techniques • Just-in-Time and Kanban systems • Lean Six-sigma • Reliability and maintenance ▪ Current issues in lean thinking 																																						
Teaching/Learning Methodology	<p>Contact hours: 39 hours</p> <p>Concepts, theories and key issues based on the literature will be introduced to students through lectures. Case studies will be used to illustrate some application aspects and to stimulate discussions leading to context-specific knowledge. Students are required to apply the knowledge to analyze some contemporary issues in the field.</p>																																						
Assessment Methods in Alignment with Intended Learning Outcomes	<table border="1" data-bbox="518 824 1469 1272"> <thead> <tr> <th rowspan="2">Specific assessment methods/tasks</th> <th rowspan="2">% weighting</th> <th colspan="6">Intended subject learning outcomes to be assessed (Please tick as appropriate)</th> </tr> <tr> <th>a</th> <th>b</th> <th>c</th> <th>d</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td>Continuous Assessment</td> <td>50%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Examination</td> <td>50%</td> <td>✓</td> <td>✓</td> <td>✓</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>Total</td> <td>100 %</td> <td colspan="6"></td> </tr> </tbody> </table> <p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>Since learning outcomes 1 and 2 are concerned with knowledge of the subject area, they are to be assessed by both examination and continuous assessment.</p> <p>Since learning outcome 3 is concerned with the ability to undertake an improvement project, it will be assessed by the project within the continuous assessment.</p> <p><i>To pass this subject, students are required to obtain Grade D or above in BOTH the Continuous Assessment and Exam components.</i></p>	Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)						a	b	c	d			Continuous Assessment	50%	✓	✓	✓	✓			Examination	50%	✓	✓	✓	✓			Total	100 %						
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	Total student study effort	126 Hrs.
Reading List and References	<p>Books</p> <p>Womack, J., and Jones, D. (the latest edition) <i>Lean Thinking: Banish Waste And Create Wealth In Your Corporation</i>, New York, Simon and Schuster.</p> <p>Womack, J., Jones, D., and Roos, D. (the latest edition) <i>The Machine That Changed The World</i>, New York, Rawson Associates.</p> <p>Rich, N., Bateman, N., Esain, A., and Massey, L. (the latest edition) <i>Lean Evolution: Lessons from the Workplace</i>, Cambridge.</p> <p>Tapping, D., and Shuker, T. (the latest edition) <i>Value Stream Management for the Lean Office</i>, Productivity Press.</p> <p>Journals</p> <p>Journal of Operations Management</p> <p>International Journal of Service Industry Management</p> <p>Decision Sciences</p> <p>International Journal of Production Economics</p> <p>International Journal of Production Research</p> <p>International Journal of Operations and Production Management</p>	