

The Hong Kong Polytechnic University

Subject Description Form

Subject Code	LGT5107
Subject Title	Total Quality Management
Credit Value	3
Level	5
Normal Duration	One Semester
Exclusion	ITC575 Principles of Total Quality Management
Objectives	<p>The purpose of this subject is to develop hands-on knowledge and practical skills that are required to formulate, deploy, manage, and implement any quality improvement projects, whether in manufacturing, service, or any other business opportunities. The core principles of quality management starts by taking (1) a customer focus and orientation, (2) management concepts for continuous improvement, and (3) employee involvement and participation with the quality management framework (the trilogy covering quality management infrastructure, quality management practices, and quality management tools and techniques. Quality management adopts an objective and data-driven approach through the extensive use of (4) analytical techniques including statistical and problem – identifying, studying, and analyzing the problems to propose optimal and practical solutions to the problems in (5) a clear quality improvement roadmap to implement the quality management actions.</p> <p>Our goal is to explain and provide the relevant and practical quality management infrastructure, practices, and tools and techniques into how these aspects can be collectively and successfully applied in managing quality of business organization to ultimately satisfy its customers (coveting internal customers, external customers (consumers/end-users), and the society). Lecturer is advised to use a mixture of lectures and in-class exercises/discussions to develop a richer understanding and application of the materials.</p> <p>Specifically, students are able to learn and master the following:</p> <ul style="list-style-type: none">▪ The core principles and precise understanding of Quality and Quality Management (QM).▪ The QM Framework and its major elements.▪ Advocates of Quality Gurus pathing the development, evolution, and contemporary development of QM.▪ The main and ultimate purpose of QM – The deployment of Voice of Customer▪ The implementation of QM in action for quality improvement projects/ activities.

	<ul style="list-style-type: none"> ▪ The major tools and techniques for QM application. ▪ The Business Excellence Models of QM. ▪ The latest development of QM in Quality 4.0 stemming from Industry 4.0 and emerging digital technologies in QM. <p>This subject contributes to the following Intended Learning Outcomes for the following programme(s):</p> <p>MSc in Operations Management</p> <p>#2: Develop the specific operations management knowledge</p>
<p>Intended Learning Outcomes</p>	<p>Upon completion of the subject, students will be able to:</p> <ol style="list-style-type: none"> a. apply QM framework (the trilogy covering quality management infrastructure, quality management practices, and quality management tools and techniques) to assess and improve operational efficiency, business process, and organizational performance, b. practice QM to improve customer satisfaction, employee involvement and participation, and continuous improvement for sustaining the attainment of corporate, strategic, and operational objectives and goals, and c. adopt QM as a strategy and tactic to achieve business excellence.
<p>Subject Synopsis/ Indicative Syllabus</p>	<p>This subject covers the following topics/areas of quality management:</p> <ul style="list-style-type: none"> ▪ Principle of Product and Service Quality ▪ Principle of Quality Management ▪ Quality Management Guru's principles and advocates ▪ Voice of Customer ▪ Quality Management Framework (the trilogy covering quality management infrastructure, quality management practice, and quality management tools and techniques) ▪ The Business Excellence Models ▪ The classical Quality Management Tools and Techniques ▪ Contemporary Issues of Quality Management
<p>Teaching/Learning Methodology</p>	<p>Contact hours: 39 hours for lectures</p> <p>Salient concepts and key issues based on the literature and practice will be introduced, explained, and discussed with the students through lectures.</p> <p>Case studies will also be used to illustrate various practical applications of QM in real-world business and commercial contexts and to stimulate discussions leading to context-specific knowledge.</p> <p>Students are required to apply the knowledge to analyze and master the relevant contemporary issues in the field.</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		
	Continuous Assessment – Coursework	50%	✓	✓	✓		
	Final examination	50%	✓	✓	✓		
	Total	100 %					
	<p>Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:</p> <p>The achievement of the three intended subject learning outcomes is depended on students’ knowledge to master and comprehend the precise concepts of quality management on the one hand and the abilities to digest and apply quality management practically in the business and commercial environments on the other.</p> <p>The continuous assessment component is effective in assessing the students’ abilities in applying quality management knowledge and technique, which is needed as the basis to assess the three intended subject learning outcomes of this subject.</p> <p>Written final examination is effective in assessing the overall knowledge of the entire coverage of both academic and practical application of quality management.</p> <p>To reflect the significant contemporary issues and application of quality management and emerging technologies relating to this subject, 10% (or more) of the overall weighting of this subject is based on individual assessment concerning the related knowledge of the contemporary issues of and emerging technologies for quality management.</p>						
Student Study Effort Expected	<p>Class contact:</p> <ul style="list-style-type: none"> • Lectures 39 hrs. <p>Other student study effort:</p> <ul style="list-style-type: none"> • Reading and self-study 42 hrs. • Preparation for coursework and final examination 45 hrs. <p>Total student study effort 126 hrs.</p>						

<p>Reading List and References</p>	<p>Recommended Reference Books:</p> <ul style="list-style-type: none"> • Besterfield, D.H., Besterfield-Michna, C., Besterfield, G.H. and Besterfield- Sacre, M. (the latest edition), <i>Total Quality Management</i>, Prentice-Hall. • Foster, S.T. (the latest edition), <i>Managing Quality: Integrating The Supply Chain</i>, Pearson Education. • Goetsch, D.L. and Davis, S.B. (the latest edition), <i>Quality Management for Organizational Excellence: Introduction to Total Quality</i>, Pearson Education. • Imai, Masaaki, (the latest edition), <i>Gemba Kaizen</i>, McGraw Hill. <p>Recommended Journals:</p> <ul style="list-style-type: none"> • Quality Management Journal • Journal of Quality Management • Asia-Pacific Journal of Quality Management • International Journal of Quality and Reliability Management • Journal of Operations Management • Management Science • Production and Operations Management • International Journal of Production Economics • International Journal of Production Research • International Journal of Productivity and Quality Management • International Journal of Six Sigma and Competitive Advantage • International Journal of Lean Six Sigma • International Journal of Service Industry Management • Harvard Business Review
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