108 學年度 第 X 學期 六標準差績效管理 Six Sigma Performance Management 課程綱要

<table>
<tr><td colspan="3">課程名稱：
（中文）六標準差績效管理
（英文）Six Sigma Performance Management</td><td colspan="2">開課單位：
永久課號：</td><td>工管專
IEM5233</td></tr>
<tr><td colspan="6">授課教師：
彭文理</td></tr>
<tr><td>學分數：</td><td>3.00</td><td>必 / 選修：</td><td>選修</td><td>開課年級：</td><td>*</td></tr>
<tr><td colspan="6">先修科目或先備能力：
無</td></tr>
<tr><td colspan="6">課程概述與目標：
所謂六標準差是指一種追求高品質，以事實數據導向之做法，用來分析與解決問題之根源，整合公司的管理系統，並以流程導向為主軸，徹底執行專案改善，達到降低運作週期、減少變異以提高顧客滿意度。本課程將以六標準差管理之改善步驟為架構，著重於六標準差的觀念、方法與工具，並輔以實際案例結合統計分析與運用，期由理論與實務並重的說明，使同學更容易瞭解，以奠定日後從事管理及分析的能力。
Six Sigma is an implementation of total quality management, which aims to take process and product to levels with all customer requirements met. The Six Sigma methodology, consisting of the steps "Define - Measure - Analyze - Improve - Control," is the roadmap for achieving this goal. The purpose of this course is to give students a clear understanding about the concept of Six Sigma and evolution of quality management. Topics include basic technical tools and various quality methodologies that underpin Six Sigma, which will be learned in this course. Extensions and application examples will be presented and discussed in the class.</td></tr>
<tr><td colspan="2">教科書（請註明書名、作者、出版社、出版年等資訊）：</td><td colspan="4">自編講義、及相關資料
中文參考書目：
[1]	吳嘉晟、鄭大興 (2003).製造業六標準差應用手冊. 新文京開發出版.
[2]	樂為良 譯. (2001). 六標準差 - 奇異、摩托羅拉等頂尖企業的高績效策略 (The Six Sigma way: how GE, Motorola, and other top companies are honing their performance). 麥格羅．希爾國際出版公司.</td></tr>
</table>

[3]	丁惠民 譯 (2006). 精實六標準差工具手冊品質管理 (The Lean Six Sigma Pocket Toolbook). 麥格羅．希爾.
[4]	傅和彥、黃士滔 (2002). 品質管理. 前程企業管理.
[5]	楊素芬 (2002). 品質管理. 華泰文化出版社.
[6]	蘇朝墩、陳麗妃譯 (2002). 實現六標準差的第一本書. 商周.
[7]	李旭華(2003). 品質管理. 滄海書局.
[8]	徐世輝 (2005). 應用統計學. 華泰書局.
[9]	郭倉義. 邁向 6σ 成功之路 (PPT files). 中山大學企管系.
[10]	蘇朝墩 (2002). 全面品質管理講義. 交大工工所.
[11]	蘇朝墩 (2009). 六標準差. 前程文化.
英文參考書目：
[12]George, M. L., Rowlands, D., Price, M. and Maxey, J. (2005). The Lean
Six Sigma Pocket Toolbook. McGraw-Hill.
[13]Pande, P. S., Neuman, R. P. and Cavanagh, R. R. (2002). The Six Sigma
Way - Team Fieldbook. McGraw-Hill.
[14]Brue, G. (2002). Six Sigma for Managers. McGraw-Hill
[15]Besterfield, D. H., Besterfield-Michna, C., Besterfield, G. H. and Besterfield-Sacre, M. (2003). Total Quality Management (3rd edition).
Prentice-Hall Inc.
[16] Evans, J. R. (2005). Total Quality: Management, Organization and
Strategy (4th edition). Thomson South-Western.
[17]Evans, J. R. and Lindsay, W. M. (2005). The Management and Control of
Quality (6th edition). Thomson South-Western.
[18]Goetsch, D. L. and Davis, S. (2006). Quality Management: Introduction to

	Total Quality Management for Production, Processing, and Services (5th edition). Prentice-Hall Inc. [19]Summers, D. C. S. (2005). Quality Management: Creating and Sustaining Organizational Effectiveness. Prentice-Hall Inc. [20]Keller, G. and Warrack, B. (1999). Statistics for Management and Economics. Duxbury.

課程大綱		分配時數				備註
單元主題	內容綱要	講授	示範	習作	其他	

教學要點概述：

1.學期作業、考試、評量

1.學期作業、考試、評量

Case Study, Reading Report, Final Exam/Term Project

Class Participation, Discussion, Assignments

2.教學方法及教學相關配合事項（如助教、網站或圖書及資料庫等）

師生晤談	排定時間	地點	聯絡方式

每週進度表

週次	上課日期	課程進度、內容、主題
1		Introduction and Overview - Introduction to Quality Management - Definition and Concepts of Six Sigma - The Scope of Six Sigma: PFSS, DFSS, MFSS - Principles and Implementation Steps for Six Sigma
2		Define Phase - Project Selection and Scope Definition
3		Define Phase

		- Team Formation, Roles and Responsibilities - Identify Customer Requirements and Voice of the Customer (VOC)
4		Define Phase -Tools and Techniques (Kano Model, Quality Function Deployment, QC New 7 Tools)
5		Measure Phase - Objectives, Measurement Systems Validation and Analysis - Data Collection Plan: Tools and Techniques
6		Measure Phase - Establishing Process Baseline and Determine Process Performance
7		Analyze Phase - Identify Potential Root Causes - Conduct Statistical Analysis: Tools and Techniques
8		Analyze Phase - Conduct Statistical Analysis: Tools and Techniques - Apply Failure Mode and Effects Analysis (FMEA)
9		Improve Phase - Objectives and Techniques for Process Improvement
10		Improve Phase - Generate Potential Solutions or Improvement Ideas
11		Improve Phase - Evaluate and Select Solutions and Present Recommendations
12		Improve Phase - Implement the Recommended Changes
13		Control Phase - Objectives and Develop a Control Plan
14		Control Phase - Implement Monitoring System: Tools and Techniques for

		Controlling Processes
15		Control Phase - Implement Monitoring System: Tools and Techniques for Controlling Processes
16		Control Phase - Review and Evaluate the Results of Changes
17		Discussions on Case Studies
18		Discussions on Case Studies

備註：

1.請遵守智慧財產權觀念及勿使用不法影印教科書。

2.其他欄包含參訪、專題演講等活動。