

**THE UNIVERSITY OF HONG KONG  
FACULTY OF BUSINESS AND ECONOMICS**

**School of Business  
BUSI0023 Operations and Quality Management  
2009-2010 First Semester**

### I. Information on Instructor and Tutor

Tutor:

Pre-requisites:

Textbook: Managing Quality – integrating the supply chain  
S. Thomas Foster

Pearson, Prentice Hall, 3<sup>rd</sup> edition, copyright 2007, ISBN 0-13-223996-5



### II. Course Description and Objectives

Traditionally, operations management has been defined as a transformation process. Inputs (such as material, machines, labor, management, and capital) are transformed into outputs (goods and services). In operations management, we try to ensure that the transformation process is performed efficiently and that the output is of greater value than the sum of the inputs. During the last twenty years, operations management centered no longer on cutting cost but quality improvement has become the major focus. Quality was no longer a technical issue, but a business issue. Quality was considered as a source of competition advantage and all operation functions inside the organization focused on the firm's ability to produce goods or services, which meet customer's expectations. This course is designed to give the student a perspective of operations and quality management based on the changing facets of global competition.

#### ■ Course objectives

1. To understand the evolution of operations and quality management
2. To understand the fundamental concept of operations strategy
4. To understand the major concepts of quality management
5. To integrate a generic framework for managing operations and quality improvement
6. To explore the concept of customer value as a source of competitive advantage

### III. Learning Outcomes

On completion of this course, students should be able to

- ILO1.** Develop an understanding of the complex issues surrounding operations and quality management in manufacturing and service operations.
- ILO2.** Use systematic approaches in assessing operations and quality capability of organizations.
- ILO3.** Apply process improvement tools to redesign an organization operations process.
- ILO4.** Develop skills in the design and implementation of an effective operations management system.

### IV. Alignment of Program and Course Outcomes

<b>Program Learning Outcome</b>	<b>Course Learning Outcome</b>
1. Acquisition and internalization of knowledge and skills in key functional areas	<b>ILO1, ILO2, ILO3, ILO4</b>
2. Application and integration of business knowledge	<b>ILO2, ILO3, ILO4</b>
3. Inculcating professionalism and leadership	<b>ILO1, ILO4</b>
4. Developing global outlook	<b>ILO1</b>
5. Mastering communication skills	<b>ILO3, ILO4</b>

## V. Teaching and Learning Activities

- Lecture:**  
Interactive lectures on major concepts and issues with PowerPoint slides are conducted. Students will be invited to share their view and experience in applying the concepts.
- In-class discussion**  
Discussion questions will be provided to encourage a group or individual student to participate in discussions and share views.
- Video**  
Students are required to discuss a specific set of questions based on the video.
- Case analysis and presentation**  
Students meet outside the class to analyze the case and make a 20-minute presentation of the case in the class.
- Group project**  
Students are divided into groups and are required to conduct a process reengineering project. Each group makes a 30-minute presentation and submits a group report.

## VI. Assessment

1. <b>Individual Paper</b>	<b>30%</b>
2. <b>Group Project 1</b>	<b>60%</b>
3. <b>Group Project 2</b>	<b>10%</b>
<b>Total</b>	<b><u>100%</u></b>

## VII. Standards for assessment

### Individual Paper (30%)

Each student will be required to complete an individual assignment. The assignment would relate to operation management of an international/national quality award. Each student will be required to 1.) Comprehend the award winning organization case material. 2.) Search and understand the related international quality award criteria, 3.) Analyze the case content verse the relevant award criteria 4.) Prepare a written report with schematic diagrams (e.g. flow diagrams, relationship diagrams or mind maps, etc.) to describe how the operations were successfully designed against each criteria. The attendance and individual sharing will be taken into account.

The following grading criteria applied:

1. Content of the report – 60%
2. Presentation and Discussion – 30%
3. Style – 10%

#### Grading Criteria

ILO	A+ A A-	B+ B B-	C+ C C-	D+ D	F
ILO1 ILO2 ILO4	Very good to excellent ratings on some or all three criteria.	Good to very good ratings on some or all three criteria.	Fair to good ratings on some or all three criteria.	Fair ratings on all three criteria.	Fail to submit the paper

#### Group Project 1 (60%)

Students are divided into groups and are required to conduct a process reengineering project. Each group makes a 30-minute presentation and submits a group report. The group presentation and group report will be evaluated based on the following criteria (i.e., content coverage, articulation on critical issues, use of process improvement tools, quality of interaction at the Q&A session, and the content of the report). In determining the grade, input from other groups' evaluation and their questions are being considered.

#### Group project 2 (10%)

*Same group of students are required to prepare for an A3 size poster section on "Forum learning summary".*

#### Grading Criteria

ILO	A+ A A-	B+ B B-	C+ C C-	D+ D	F
ILO1 ILO2 ILO3 ILO4	Very good to excellent ratings on some or all six criteria.	Good to very good ratings on some or all six criteria.	Fair to good ratings on some or all six criteria.	Fair ratings on all six criteria.	Fail to prepare and present the project.

### VIII. Academic Conduct

The University Regulations on academic dishonesty will be strictly enforced! Please check the University Statement on plagiarism on the web: <http://www.hku.hk/plagiarism/>

#### Course Schedule

SESSION	TOPIC
Session 1	<u>Differing Perspectives on Quality</u> The session references various definitions of quality, and the distinction between Service and Manufacturing from a quality perspective and delves into "The Supply Chain". Major discussion includes.

	<ol style="list-style-type: none"> <li>1. Recognizing Different Perspectives on Quality</li> <li>2. What is Quality</li> <li>3. Differing Functional Perspectives on Quality</li> <li>4. Three Spheres of Quality</li> </ol> <p><b>Reference Reading:</b> Course Textbook – Chapter 1</p> <p>=====</p> <p><i>Tutorial :- Discussion on assignments of this module</i></p> <ol style="list-style-type: none"> <li>1. <i>Individual Paper: Applying the Malcolm Balridge National Quality Award : A Case Analysis.</i></li> <li>2. <i>Group Project: Process Reengineering: Why, What and How?</i></li> </ol>
<p>Session 2</p>	<p><u>Quality Theory</u>                  This chapter discusses the major “players” and their contributions to the subject, and points out “there is not a unified theory explaining quality improvement.” The chapter also makes a statement that quality improvement is positively linked to employee morale. In this session, resolving the Differences in Quality Approaches will be discussed.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 2</p> <p>=====</p> <p><i>Tutorial: Case study, Textbook pg. 29 case “FEDEX: Managing quality day and night”</i></p>
<p>Session 3</p>	<p><u>Strategic Quality Planning</u>                  Quality is strategic. This may seem somewhat obvious, but the actions of companies implementing quality measures often obscure this fact. This is especially true when a company is in a reactive mode and does not use effective planning. In this important aspects of strategic quality planning are discussed.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 4</p> <p>=====</p> <p><i>Tutorial: Initial progress report and discussion of individual assignment</i></p>
<p>Session 4</p>	<p><u>The Voice of the Customer &amp; Market</u>                  This session focuses on the “voice of the customer” in helping firms define their quality programs. The session begins with a discussion of customer-driven quality and describes it as: a proactive approach to satisfying customer needs by learning what customers want and then designing products and services accordingly</p> <p>This session also looks into the voice of the market. The market includes not only the customer, but also includes the competitors, the customers of competitors, potential competitors, and potential customers.</p> <p><b>Major Topics:</b>                  Benchmarking the best practice of core competencies and operations processes.</p>

	<p>Outside the box benchmarking. A typology of best quality operations practices of world-class organizations.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 5 &amp; 6, also Supplied reading Materials</p> <p>=====</p> <p><i>Tutorial: Informal progress report on group project</i></p>
<p>Session 5</p>	<p><u>Managing Quality for the Multinational Firm</u>                  The task of managing quality is affected by increased globalization. This chapter discusses the opportunities and obstacles created by globalization. The differences between regions of the world also include discussions of various quality approaches that have been developed in those regions and the awards that act as quality barometers within each.</p> <p>Session focus - Malcolm Baldrige National Quality Award pg 70.</p> <p><b>Required Reading:</b> Supplied reading materials on Malcolm Baldrige National Quality Award</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 3</p> <p>=====</p> <p><i>Tutorial: Group project internal meeting</i></p>
<p>Session 6</p>	<p><u>Designing Quality Services</u>                  This session attempts to examine the design of service. Even manufacturing firms depend on service at some point in the product life cycle. Quality service is therefore important in both the service and manufacturing environment. Both the service and manufacturing depend on satisfied customers for continuing business.</p> <p>This session discusses the factors of service, both from a generic and a quality perspective. It then discusses some of the tools such as SERVQUAL and gap analysis that can be used to enhance a quality service environment.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 8</p> <p>=====</p> <p><i>Tutorial: Ritz Carlton Hotels (Course Textbook pg 237)</i></p>
<p>Session 7</p>	<p><u>Tools of Quality</u>                  This session introduces the Statistical tools that can be used to implement quality. Major topics include: - Improving the System, Ishikawa’s Basic Seven Tools of Quality, and the x bar R control chart.</p> <p><b>Reference Reading: Course Textbook – Chapter 10 &amp; Chapter 12</b></p> <p>=====</p> <p><i>Tutorial: Progress report on group project –with initial presentation material</i></p>
<p>Session 8</p>	<p><u>Managing Quality for the Multinational Firm</u></p>

	<p>Session focus - ISO 9000: pg 91</p> <p><b>Reference Reading:</b> Supplied reading material &amp; Course Textbook – Chapter 3</p> <p>=====</p> <p><i>Tutorial: Group project internal meeting</i></p> <p><i>*Submission of individual paper</i></p> <p><i>(NOTE:- late submission will be subjected to mark reduction penalty)</i></p>
<p>Session 9</p>	<p><u>Quality forum</u> - external speaker(s) will be invited</p> <p>=====</p> <p><i>Tutorial: An A3 size poster section on “Forum learning summary”. (Group report submission and presentation).</i></p>
<p>Session 10</p>	<p><b>Contemporary issues - Lean Operation ; Just-in-time system and Value Streaming Mapping</b></p> <p>Major Topics:</p> <ol style="list-style-type: none"> <li>1. The JIT Concept</li> <li>2. Types of wastes</li> <li>3. Kanban</li> <li>4. Lead time and TAKT time</li> </ol> <p><b>Reference Reading:</b> Supplied reading Materials</p> <p>=====</p> <p><i>Tutorial: Final discussion session for Group project</i></p>
<p>Session 11</p>	<p><b>Project Presentation (Session A)</b></p>
<p>Session 12</p>	<p><b>Project Presentation (Session B) and Summary</b></p>