

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

**School of Business  
BUS10023 – Operations and Quality Management  
2010/2011 First Semester**

**I. Information on Instructor and Tutor**

Instructor: Ir. Dr Frankie SM Law  
Email: frankielawsm@gmail.com  
Office: TBA  
Phone: TBA; Mobile-51301832  
Consultation times: By appointment

Tutor:

Pre-requisites:

Textbook: Operations Management,  
William J. Stevenson,  
McGraw-Hill, 9th Edition, Copyright 2007,  
ISBN-10: 0-07-304191-2 (Student Version).

**II. Course Description and Objectives**

**Course description**

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

**Course objectives**

1. Familiarize students with the evolutions of operations and quality management.
2. Provide students with an insight into the fundamental concept of operation strategy in organizations.
3. Introduce students with the major concepts of quality management.
4. Equip students with a generic framework from which able organizations managing their operations and quality in an efficient and effective manner.
6. Explore the concept of customer value as a source of competitive advantage.
5. Improve learning skills i.e. critiquing, synthesizing and learning reflection.

### III. Learning Outcomes

On completion of the subject, students should be able to:

ILO1: Develop an understanding of the complex issues surrounding operations and quality.

ILO2: Use systematic approaches in assessing operations and quality capability of organizations.

ILO3: Apply process improvement tools to redesign an organization operation process.

ILO4: Develop skills in the design and implementation of an effective operations management system.

### IV. Alignment of Program and Course Outcomes

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

### V. Teaching and Learning Activities

This course combines interactive lectures and short exercise in addition to more in-depth group project and case study. Various teaching methods and course activities are listed as follows:

1. Lectures:  
Interactive lectures on major concepts and issues with PowerPoint slides are conducted. Students are invited to share their views and experience in applying the concepts.
2. In-class discussion:  
Discussion questions will be provided to encourage a group or individual student to participate in discussions and share view.
3. Video:  
Students are required to discuss a specific set of questions based on video.
4. Quality Forum:  
Guests will be invited share their working experience in applying quality management to practical situations. Individual student will be required to submitted a page of learning statement through reflecting on the forum content and his/her discovery.
5. Case Analysis:  
Students meet outside the class to analyze the given case, to participate case discussion and propose suggestions and recommendations in the class.

6. **Group Project:**

Students are divided into a workgroup of approximately 4-5 people. The group will reflect the diversity of gender and ethnicity within the student body. Each group is required to select a 'process re-engineering related' project. A presentation of 20 minutes duration on the results of the group project will be made to the class. Ten minutes will be allocated for questions and group feedback. Each group is required to submit a group report.

**VI. Assessment**

<b>1. Individual Paper-Case Study</b>	<b>40%</b>
<b>2. Group Project</b>	<b>60%</b>

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<b>Total</b>	<b><u>100%</u></b>
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**VII. Standards for assessment**

**Individual Paper:**

Each student will be required to conduct a case study (common case for the class). The case would be on board coverage of operations and quality management .The selected case outlines various management perspectives. It covers organizational change & development, strategic planning, process re-engineering, organizational communication and quality functional deployment. Each student will be required to submit a case study report. The following grading criteria applied:

1. Content of report -40%
2. Writing style -30%
3. Demonstrated ability to present a logically-argued course of actions and recommendations -30%

Grading criteria:

ILO	A+ A A-	B+ B B-	C+ C C-	D+ D	F
ILO1 ILO2 ILO3	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:**

Students are divided into groups and are required to conduct a process re-engineering project. Each group makes a 20-minute presentation and submits a group report. The group presentation and group report will be evaluated based on six criteria (i.e. presentation style, 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 group's evaluation and their questions are being considered.


Grading criteria:

ILO	A+ A A-	B+ B B-	C+ C C-	D+ D	F
ILO1 ILO2 ILO3	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 submit the paper

### VIII. Academic Conduct

A student plagiarizes if he or she gives the impression that the ideas, words or work of another person are the idea, words or word of the student. So, the student should declare that, to the best of his/her knowledge and belief, the submitted assignment is his/her own work, all sources have been properly acknowledged, and the assignment contains no plagiarism.

### IX. Course Schedule

<p>Textbook: Operations Management, William J. Stevenson, McGraw-Hill, 9th Edition, Copyright 2007, ISBN-10: 0-07-304191-2 (Student Version).</p>	
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**Class: BUSI0023 Operations and Quality Management**

**Course Schedule: Class A -Monday: 14:00 -16:00; Friday: 14:00-15:00  
Class B- Monday: 16:00- 18:00; Friday: 15:00-16:00**

SESSION	TOPIC
Session 1  6 Sept 2010	<p>Course introduction: Unit Outline, Textbook and Study Materials</p> <p><u>Introduction to Operations and Quality Management</u> Major topics : A brief overview of the historical evolutions of Operations and Quality Management. Their individual comparison between manufacturing and service fields. Their cross-functional relationships with other parts of the organizations. Issues and trends in Operations and Quality Management.</p> <p>Supplementary material: 75 years of Management Ideas and Practice 1922-1997 (Harvard Business Review).</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 1 &amp; 9</p>
10 Sept 2010	<p>=====</p> <p><i>Tutorial :- Discussion on assignments of this module</i></p> <ol style="list-style-type: none"> <li><i>Individual Paper: “World Vision Australia: a not-for-profit organization, by Rowan Lewis and Di Waddell (2001)” A Case Analysis.</i></li> <li><i>Group Project: Process Reengineering: Why, What and How?</i></li> </ol>

<p>Session 2 13 Sept 2010</p> <p>17 Sept 2010</p>	<p><u>Competitiveness, Strategy, and Productivity</u> Major topics:</p> <p>Discussion on Operation Management in a boarder context which covers its issues of competition, strategy, and productivity.</p> <p>Supplementary material: How Competitive Forces Shape Strategy, by Michael Porter.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 2</p> <p>=====</p> <p><i>Tutorial: Case study, Textbook pg.63 case “The U.S. Postal Service”</i></p>
<p>Session 3 20 Sept 2010</p> <p>24 Sept 2010</p>	<p><u>Strategic Capacity Planning for Products and Services</u> Major topics:</p> <p>Capacity Planning is a key strategic component in system design process. As it encompasses many basic decisions with long –term consequences for the organization, so the importance of capacity planning is discussed. Further elaborations in the measurement of capacity, how capacity requirements (including in future states) are determined, and the development and evaluation of capacity alternatives.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 5</p> <p>=====</p> <p><i>Tutorial: Initial progress report and discussion of individual assignment</i></p>
<p>Session 4 27 Sept 2010</p> <p>01 Oct 2010</p>	<p><u>International Operations and Quality Standard</u> Major topics:</p> <p>The international operations standard benchmarking. The Baldrige Award criteria linking up to its core values and concepts. Deming Prize of organizational quality improvement program. ISO9000 ISO14000 audit and certification.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 9.</p> <p>=====</p> <p><i>No class-Public Holiday</i></p>
<p>Session 5 04 Oct 2010</p> <p>08 Oct 2010</p>	<p><u>Tools of Quality</u> Major topics</p> <p>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:</b> Course Textbook – Chapter 10</p> <p>=====</p> <p><i>Tutorial: Informal progress report on group project</i></p>
<p>Session 6 11 Oct 2010</p> <p>15 Oct 2010</p>	<p><u>Process Improvement-The best practice</u> Major topics:</p> <p>Benchmarking the best practice of core competence. The effective ways of sharing</p> <p><b>Reference Reading:</b> Supplied reading material</p> <p>=====</p> <p><i>Tutorial: Rolls Royce’s industrial experience</i></p>
	<p>Reading week</p>
<p>Session 7 25 Oct 2010</p>	<p><u>Process Improvement-Total Quality Management and Six Sigma Methodology</u> Major topics:</p> <p>This session introduces the continuous improvement program and methodology. The philosophies of Total Quality Management (TQM) and the DMAIC method and its application</p>

29 Oct 2010	<p>in the process of organizations. Obstacles to implementing TOM and Six Sigma are discussed.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 9</p> <p>=====</p> <p><i>Tutorial: Progress report on group project –with initial presentation material</i></p>
<p>Session 8</p> <p>01 Nov 2010</p> <p>05 Nov 2010</p>	<p><u>Operations Design: Product and Service</u></p> <p>Major topics:</p> <p>Various activities and responsibility of product and service design. Value analysis aids at product performance. Legal and ethical consideration in design process. Quality function deployment. Design for manufacturing.</p> <p><b>Reference Reading:</b> Course Textbook – Chapter 4</p> <p>=====</p> <p><i>Tutorial: Group project internal meeting</i></p> <p><i>*Submission of individual paper (NOTE:- late submission will be subjected to mark reduction penalty)</i></p>
<p>Session 9</p> <p>08 Nov 2010</p> <p>12 Nov 2010</p>	<p><u>Quality forum</u> - external speaker(s) will be invited</p> <p>=====</p> <p><i>Tutorial: Each student submits An A4 size of “Forum learning summary”. Group discussion and presentation.</i></p>
<p>Session 10</p> <p>15 Nov 2010</p> <p>19 Nov 2010</p>	<p><u>Contemporary issues</u> - Lean Operation ; Just-in-time system and Value Streaming Mapping</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>22 Nov 2010</p>	<p><b>Project Presentation (1<sup>st</sup> Session )</b></p>
<p>Session 12</p> <p>26 Nov 2010</p>	<p><b>Project Presentation (2<sup>nd</sup> Session ) and Summary</b></p>

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