BN2284 – TOTAL QUALITY MANAGEMENT

Module Number: BN2284

Module Title: Total Quality Management

Number of Aston Credits: 20

Total Number of ECTS Credits: 10
(European Credit Transfer)

Staff Member Responsible for the Module:

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Operations and Information Management Group

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Availability: Please see office hours on door or group administrator, John Morley, ABS266, Extension 3236

Other Staff Contributing to the Module: None

Pre-Requisite(s) for the Module: None

Module Learning Outcomes:

Overall aim

The overall aim is for students to develop an understanding of total quality management principles, frameworks, tools and techniques for effective real life applications in both manufacturing and services.

Learning outcomes

Upon successful completion of the module students will be able to:

1. Develop an understanding on quality management philosophies and frameworks

2. Develop in-depth knowledge on various tools and techniques of quality management

3. Learn the applications of quality tools and techniques in both manufacturing and service industry

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4. Develop analytical skills for investigating and analysing quality management issues in the industry and suggest implement able solutions to those.

Module Content:

Schedule	Content	Resources (chapter)
Week 1	Fundamental of quality and total quality management	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (1, 2) Basu R (2004) *Implementing Quality,* Ohio: South-Western (1)
Week 2	Quality theory, philosophies and frameworks	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (3) Foster T (2007), *Managing Quality: Integrating the Supply Chain*, 3rd Edition, New Jersey: Pearson Prentice Hall (2)
Week 3	Principle of six sigma	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (10)
Week 4	Qualitative and quantitative tools and techniques for six sigma	Basu R (2004), *Implementing Quality*, Ohio: South-Western (5)
Week 5	Customer focused quality management using QFD	Foster T (2007), *Managing Quality: Integrating the Supply Chain*, 3rd Edition, New Jersey: Pearson Prentice Hall (7) Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (4)
Week 6	Failure mode effect analysis	Foster T (2007), *Managing Quality: Integrating the Supply Chain*, 3rd Edition, New Jersey: Pearson Prentice Hall (7) Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (4)
Week 7	Designing quality services	Foster T (2007), *Managing Quality:*

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		Integrating the Supply Chain, 3rd Edition, New Jersey: Pearson Prentice Hall (8)
Week 8	Performance measurement and benchmarking	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (8)
Week 9	Design for six sigma	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (12)
Week 10	Statistical process control	Evans JR & Lindsay WM (2005), *The Management and Control of Quality*, 6th Edition, Ohio: South-Western (14)
Week 11	Revision lecture	
Week 12/13	Reading Week (Block One Exam Week)	
Week 14	Quality management in project management framework	Case studies
Week 15	Performance measurement using the analytic hierarchy process	Case studies
Week 16	Quality management in higher education	Guest lecture
Week 17	Quality management in manufacturing	Guest lecture
Week 18	Quality management in healthcare	Guest lecture
Week 19	Quality assurance: ISO 9000 and 14000	
Week 20	Process reengineering	Case studies
Week 21	Course work review and feedback	
Week 22	Course work review and feedback	
Week 23	Course work presentation	

The treatment of the learning outcomes is integrated, but broadly speaking they

are addressed specifically as follows:

Outcome 1	Week 1 and 2
Outcome 2	Week 3 to 11
Outcome 3	Week 1 to 21
Outcome 4	Week 10 to 22

International Dimensions:

Quality concepts are introduced from the USA (Deming, Juran, Crosby) and Japan (Imai, Ishikawa & Shingo).

Corporate Connections:

The well known case studies would be discussed. The groups of students would go into organisations to undertake 'live' quality improvement checks.

Links to Research:

The module contents have direct link with the state of art research on orgenizational performance measurement constructs and frameworks,process management, service quality improvement, and lean sigma approach in manufacturing quality improvement.

Learning and Teaching Rationale and Methods:

a) Method of Teaching - Lectures and tutorials, group work, project work, analysis of case studies, and presentations.

   The methods of teaching support the aims and learning objectives of the module to introduce the theoretical ideas of Total Quality Management by lectures and their application by tutorials. These tutorials will include case studies and various exercises involving group work and presentations.

b) Duration

Contact hours	46 hours
Examination	2 hours
Preparation of presentations	20 hours
Preparation of coursework	100 hours
Reading	32 hours
Total	**200 hours**

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Ethical Approval:

This module does not require any primary research and no ethical approval will be necessary.

Assessment and Feedback Rationale and Methods:

The assessment is via a group project report (40%) and a two-hour 15 minute closed book examination (60%).

The examination will take place at the end of the first teaching period to test individual basic understanding of the module content: theories, industrial practice, product flows, management, strategy, problems and dynamic behaviour.

The written examination tests outcome 1 to 4 and project work tests outcome 4.

Group Project Report

The group project takes the form of analysing business processes in an organisation of the students' choice and using the appropriate quality tools to formulate improvement suggestions. This assesses the students' ability to apply the theory and concepts in a practical real-life situation.

The due date of submission of the group project report is 27.04.2012. Failure to complete coursework on time will render a student liable to the late submission penalty applied in the Business School.

Written feedback on coursework assignments will be provided within the 6 week turnaround time specified.

Group Work

Since team working is an integral element of Total Quality Management, the project allows the students to participate in a live group-working environment. Teams of approximate size of four are self-selected by the students. The group project is assessed by means of a group report and group presentation.

The students are requested to note the following points:

- Students are advised to bring to the attention of the module lecturer any problems at an early stage
- Students have access to an arbitration system to give them the opportunity to appeal against allocations of marks which they consider to be unfair

- Students are advised to keep records of group meetings in the form of notes to allow for evaluation of contribution and effort
- Students are given an opportunity to evaluate the effectiveness of their group and its members through an evaluation form (Appendix 1). This peer evaluation consists of each individual rating all of the members of the group depending on how much they contributed to the project. Individual peer evaluation scores will be an average of the points they receive from the members of the group. This score may be used to modify the group score as a percentage for each individual member.

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GROUP CONTRIBUTION SHEET – BN2284

PLEASE COMPLETE AND **ATTACH TO THE GROUP REPORT.**

MODULE: BN2284 – TOTAL QUALITY MANAGEMENT **GROUP:**
(E,g. 100 means that the student will receive 100% of the Final Grade, 50 means the student will receive 50% of the Final Grade.)

Student Candidate No.	Contribution (%)

All group members contributed equally (Please Tick)

MODULE: **GROUP:**

Group Members Signatures (Should correspond to candidate numbers given above):