BN2284 – TOTAL QUALITY MANAGEMENT

Module Number: BN2284
Module Title: Total Quality Management
Number of Aston Credits: 20
Total Number of ECTS Credits: 10
(Chinese Credit Transfer)

Staff Member Responsible for the Module:

Mr. Christopher Owen
Operations and Information Management Group
ABS Building, Room TBC, Extension TBC
Email: owencd@aston.ac.uk

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

**Module Content:**

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<tr>
<th>Schedule</th>
<th>Content</th>
<th>Resources (chapter)</th>
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</table>
| 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)  
| Week 4   | Qualitative and quantitative tools and techniques for six sigma | Basu R (2004), *Implementing Quality*, Ohio: South-Western (5) |
| Week 7   | Designing quality services | Foster T (2007), *Managing Quality:
Week 8  Performance measurement and benchmarking

Week 9  Design for six sigma

Week 10  Statistical process control

Week 11  Revision lecture

Week 12/13  Reading Week (Block One Exam Week)

Week 14  Quality management in project management framework

Week 15  Performance measurement using the analytic hierarchy process

Week 16  Quality management in higher education

Week 17  Quality management in manufacturing

Week 18  Quality management in healthcare

Week 19  Quality assurance: ISO 9000 and 14000

Week 20  Process reengineering

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
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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 organizational 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

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<tr>
<th>Activity</th>
<th>Hours</th>
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<tr>
<td>Contact hours</td>
<td>46</td>
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<tr>
<td>Examination</td>
<td>2</td>
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<td>Preparation of presentations</td>
<td>20</td>
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<td>Preparation of coursework</td>
<td>100</td>
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<tr>
<td>Reading</td>
<td>32</td>
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<td><strong>Total</strong></td>
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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.
GROUP CONTRIBUTION SHEET – BN2284

PLEASE COMPLETE AND ATTACH TO THE GROUP REPORT.

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(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.)

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<th>Contribution (%)</th>
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All group members contributed equally (Please Tick)

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MODULE: GROUP:

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

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