

INTRODUCTION TO MANAGING QUALITY

Course No	:	BUS 281
Course Title	:	INTRODUCTION TO MANAGING QUALITY
Prerequisites	:	BUS 152
Course Type	:	Major – Elective
Faculty Member	:	Dr. ; Room # ; Telephone ; e-mail ;
Office Hours	:	
Class Time	:	
Lecture Class	:	

Course Objectives:

The objective of this course is to make students familiar with many of the techniques and concepts of quality management. This will occur as the result of substantial reading, in-class discussion, and self-directed projects. As a result of this course, students will be equipped with the necessary knowledge and a structured process for implementing quality management in an organization.

Course Description:

This course examines concepts, tools, and techniques used in the management and measurement of quality, productivity, and competitiveness in an international environment. It focuses on how firms add value and compete with quality. Topics include quality control and management, employee involvement in quality, team building for quality, quality circles, relation between quality, productivity, and competitiveness, and statistical process control. The course emphasizes the development of decision-making skills through the use of case analysis.

Course Outline:

1. Definitions of quality, quality control and assurance, prevention and detection modes.
2. Models for the cost of quality, reporting of quality costs.
3. Approaches to quality management, e.g. TQM, Six sigma
4. Evolution of quality systems.
5. Application of quality management principles to quality management systems.
6. The ISO9000 series of standards.
7. UAE quality awards.
8. Documentation systems, third party accreditation.
9. The PDCA cycle for Continuous improvement.
10. Problem solving techniques.
11. Statistics for statistical process control, Probability normal distribution; variation; standard deviation; of means; areas under the normal curve.
12. Statistical tools for quality improvement, introduction to Control charts for variables and attribute data. Process capability analysis.
13. Taguchi techniques for the design of experiments; orthogonal arrays; the concept of 'noise', multiple response analysis.
14. Further techniques for managing quality e.g., Failure mode and effect analysis; Benchmarking.

Learning Outcomes:

Upon successful completion of the course, the student should be able to:

1. Describe the role of quality management in the organization and management of business and service sectors and critically appraise the approaches to managing quality.
2. Understand the role of quality management systems and interpret selected quality management system standards.
3. Describe the various links between European legislation, product liability legislation and quality management.
4. Use some of the statistical tools and techniques for quality improvement and problem solving and apply the principles of factorial design of experiments to production situations.

Use of Modern Instructional Technology:

Use of LCD Projector, PC, CD ROM, modern Spreadsheet and Electronic presentation packages

Skills to be developed:

This course helps students in developing the following skills:

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| 1. Communication (Oral & written) | Through Assignments, Case Study discussions and Examinations |
| 2. Analytical | Through Case studies and examinations |
| 3. Team Work | Through Case studies |
| 4. Creative Thinking | Through Case studies, assignments, classroom discussions |
| 5. Adaptability to Change | Through Case studies, and examinations |
| 6. Ethics | Through lectures and assignments |
| 7. Use of Information Technology | Through use of PCs, Internet, CD-ROM, Statistical data base in the library |
| 8. International issues | Through Case studies, assignments, classroom discussions, and examinations |

Evaluating Student Performance:

Class participation and attendance	10%
Individual assignments	20%
Mid-term examination	20%
Final Exam	50%

Assignment	LO1	LO2	LO3	LO4
Class Participation	X		X	
Class Assignments		X		X
Mid-term exam	X		X	
Final exam	X		X	

Grading:

<u>Percentage Score</u>	<u>Letter Grade</u>	<u>GPA Points</u>	<u>Percentage Score</u>	<u>Letter Grade</u>	<u>GPA Points</u>
90 - 100	A	4.0	70 - 74	C	2.0
85 - 89	B+	3.5	65 - 69	D+	1.5
80 - 84	B	3.0	60 - 64	D	1.0
75 - 79	C+	2.5	< 60	F	0.0

Educational Resources:

<i>Educational Resource</i>	Description	Comments
Textbooks Required	Managing Quality – An Integrative Approach by S. Thomas Foster, Jr.; Prentice-Hall Publishing Co., 2001; 2 nd ed. 'Total Quality Management. Text with Cases' J Oakland, Butterworth-Heinemann, 2000	
References	'Managing Quality'. B Dale, Blackwell, 1999 A Tool book for Quality Improvement and Problem Solving' D Straker, Prentice Hall, 1995 'Introduction to Statistical Quality Control' 4 th ed., D C Montgomery, John Wiley, 2001 'Taguchi Techniques for Quality Engineering' P J Ross, McGraw Hill, 1988 'Total Quality Management' J Oakland, Butterworth-Heinemann, 1993	
Computers	Internet searches for obtaining info on Quality Management.	
CD - ROM :	(CD-ROM) data base in the library + Action learning through CD Accompanying the textbook	
Other Resources:	Library resources, Internet search of periodicals	

Course Schedule & Outline:

Sixteen Week Semester, 3 hrs/Wk

Date	Week	Outline Syllabus	Learning Outcomes	Homework Assignments, Due dates
February 12/2-16/2	1		LO1	
February 19/2-23/2	2		LO2	
May 28/5- 31/5		General Review		