# **COURSE OUTLINE [TOTAL QUALITY MANAGEMENT]**

### 1. GENERAL

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SCHOOL	Business Administration		
ACADEMIC UNIT	Business Administration		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	DE0302	SEMESTER	В
COURSE TITLE	TOTAL QUALITY MANAGEMENT		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
Lectures, Essay, Presentation		3	6
COURSE TYPE	GENERAL BACKGROUND		
PREREQUISITE COURSES:	NONE		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	NO		
	https://openeclass.uom.gr/courses/INTER1117/		

#### 2. LEARNING OUTCOMES

# **Learning outcomes**

The primary objective of the course is to provide specialized and cutting-edge knowledge about the challenges/problems involved in quality management and improvement and its strategic importance in any organization. The aim is for students to identify and explain the main questions and problems faced by executives in terms of quality management and improvement, customer satisfaction, as well as the satisfaction of all stakeholders of a business, both in industry and in service organizations. Students practice their critical thinking about how the quality of the offered products (goods and services) is defined, how it is managed and how it is improved, as well as the quality of the operations of the organizations and make the corresponding decisions. Students understand the basic principles, theories, methodologies and practices of quality management, distinguish and judge the role of quality within the enterprise, its effect on increasing the competitiveness of the enterprise and its importance for its overall performance and sustainability. Students recognize and analyze the basic quality models, as well as the basic tools and methods used in solving quality problems and in its continuous improvement. Each course is devoted to a specific topic of Total Quality Management (Definitions, historical development and significance of Total Quality Management, Dimensions and Costs of quality, Quality and productivity, basic philosophies and principles of QMS, ISO 9000 quality management systems, ISO 14000 environmental management systems, EFQM/ MBNQA/CAF Business Excellence Models, Benchmarking, Quality Improvement Tools, Statistical Quality Control and Process Capability Analysis, Six Sigma Methodology). Students relate theory to practice, conclude the benefits of adopting key areas of operations management, expand and increase knowledge in the field of Total Quality Management and cultivate original thinking through the study of real cases in Greek and foreign companies. In this way they can use the knowledge and skills they have acquired in a professional / business context.

### **General Competences**

- The course aims at the following:
- Quality management decision making
- Teamwork
- Search for, analysis and synthesis of data and information, with the use of the appropriate tools taught.
- Working independently
- Working in an international environment
- Project planning and management
- Production of free, creative and inductive thinking
- Respect for the natural environment

## 3. SYLLABUS

In recent decades, the need for students to learn and understand the principles of Total Quality Management (TQM) has become particularly evident. Organizations that hire university graduates require their new employees not only to understand the importance of providing quality products and services to the customers, but also the principles and tools of TQM. This course presents the basic principles and tools related to TQM and provides several case studies which can be used as a basis for class discussion. It focuses on the continuous improvement of all aspects and expressions of a business, from design to production, marketing and after-sales service.

It covers the concept of Quality, Total Quality and TQM, the different approaches of TQM experts, the connection with recognized business excellence awards (The Deming Award, The Malcolm Baldrige National Quality Award, The European Quality Award, CAF), quality control, quality management standards ISO 9001, ISO 14001, quality culture, attitudes and behaviors, the design and implementation of a TQM program, the measurement of cost elements quality, customer satisfaction measurement, 6s quality, quality improvement tools and methods.

In particular, after completing the course, students will be introduced to quality management improvement methods to such an extent that they understand:

- The various interpretations and definitions of quality (internal and external), quality control, quality assurance and total quality, total quality management
- The various quality management programs, models and awards that lead organizations to business excellence.
- The various quality management tools and techniques that facilitate the implementation of quality programs.
  - The need to continuously measure and improve customer satisfaction
- The need for an accurate assessment of quality cost elements and process management
- The importance of leadership and management's commitment to highlighting quality as a strategic issue
  - The importance of people's involvement in quality improvement
  - Statistical process control and 6s quality

Teaching is delivered through lectures, which will be supported by the use of relevant and recommended books and published articles in academic journals. Theory is combined with practice through case studies and video viewing. Case studies focus on large and small companies from the manufacturing and service sectors in the USA, Asia and Europe (including cases from Greek industry).

# 4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	Face-to-face, Distance learning		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	The Open-e-Class e-learning platform is used to support the organization of the course. All slides, examples, case studies, scientific articles, or any other material related to the course are posted there. Both the platform and e-mail are used as a means of communication with the students.  Websites related to the subject and individual sections of the course are suggested.  Material from these websites is used in understanding the course and in presenting best practices and examples.		
TEACHING METHODS	Activity	Semester workload	
	Lectures	36 hours (12 lectures * 3 hours each)	
	Study and analysis of bibliography	90 (2.5 hours for each hour of lecture)	
	Project (written report)	40 hours	
	Project (presentation)	4 hours	
	Course total	170 hours	
STUDENT PERFORMANCE EVALUATION .	<ul> <li>Language of Evaluation: Greek</li> <li>Evaluation criteria:         <ul> <li>Written exam at the end of the semester (short answer questions, multiple choice questions, problem solving) 50%</li> <li>Team work project and Presentation in class 50%</li> </ul> </li> <li>The individual criteria, as well as the exact weight of each in the overall evaluation of the students, are presented to the classroom at the beginning of the semester and are explicitly mentioned in the course outline. The objective and reliable assessment of student performance is ensured through the multiple assessment methods, the multiple topics in the written exams (open questions – multiple choice questions – exercises), as well as the frequent change of these topics.</li> <li>The transparency of the assessment is ensured by students having the possibility to see their papers and assignments within a period of approximately one month from the day their grades are announced, so that any questions or objections can be resolved</li> </ul>		

### 5. ATTACHED BIBLIOGRAPHY

## Suggested bibliography:

- Tsiotras G., "Total Quality Management", 2<sup>nd</sup> edition, Broken Hills, Cyprus.
- Aguago, R., Dr Deming: "The American Who Taught the Japanese About Quality", Secacus N.J.: Carol Publishing Group, 1990.
- American Productivity and Quality Centre, The Benchmarking Management Guide, Productivity Press Inc., 1993.
- Award Criteria Malcolm Baldrige National Quality Award, United States Department of Commerce, Gaithersburg, Maryland.
- Backford, J., "Quality: A Critical Introduction", Routledge, 1998.
- Bank John, The Essence of Total Quality Management, Prentice Hall, 1992.
- Berry, T.H., Managing the Total Quality Transformtion, New York: McGraw-Hill 1991.
- Bogan C. and English M., Benchmarking for Best Practices-Winning Through Innovative Adaptation, McGraw-Hill, Inc. 1994.
- Bounds G., Yorks L., Adams M. and Ranney G., Total Quality Management-Toward the Emerging Paradigm, McGraw-Hill, 1994.
- Camp, R.C., Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance, ASQL Quality Press, 1989.
- Crosby, P.B. Quality Is Free: The Art of Making Quality Certain, New York, McGraw-Hill, 1979.
- Dale G. Barrie, Managing Quality, Prentice Hall, 2nd edition, 1994.
- Dale, B., Cooper, C., «Total Quality And Human Resources: An Executive Guide», Blackwell Publishers, 1992.
- Dale and Plunkett, Managing Quality, Philip Allan, 1990.
- Deming Edwards, Out of the Crisis, Massachusetts Institute of Technology.
- Dervitziotis K., Total Quality Management (in greek), 1993.
- Dickens, P., "Quality and Excellence in Human Services", Wiley, 1994.
- Ernest C., Total Quality: An Executive's Guide for the 1990s. R.D. Irwin Inc., 1990.
- Evans, J. R., Lindsay, W. M., "The Management and Control of Quality", 5<sup>th</sup> ed., West, 2002.
- Feigenbaum, A.V., "Total Quality Control", 3<sup>rd</sup> ed., McGraw-Hill, 1991.
- Feigenbaum A.V., "Total Quality Control: Engineering And Management", McGraw-Hill, 1961.
- Fields, J.C., "Total Quality For Schools: A Guide For Implementation", ASQC Quality Press, 1994.
- Flood R., Beyond TQM, John Wiley & Sons, 1995.
- Garvin, D, Managing Quality, New York, Free Press, 1988.
- Great Northern Case Study, Malclom Baldrige National Quality Award, United States Department of Commerce, Gaithersburg, Maryland.
- Grosby P.B., Quality Without Tears: The Art of Hassle Free Management, New York, McGraw-Hill, 1984.
- Hakes, C., ed., Total Quality Management: The key to Business Improvement, London: Chapman & Holl, 1991
- Hall, T.J., The Quality Manual: the Application of BS 5750, ISO 9001, EN 29001, John Wiley, 1992.
- Hradesky, J.L., "Total Quality Management Handbook", McGraw-Hill, 1995.
- Ishikawa Kaoru, Guide to Quality, Tokyo, Asian Productivity Organization, 1982.
- James P.T.J., "Total Quality Management: An Introductory Text", Prentice Hall, 1996.
- Juran J.M., and Gryna F.M., Juran's Quality Control Handbook, 3rd edn. McGraw-Hill: New York, 1988.
- Juran, J.M., Juran on Leadership for Quality, Free Press, New York, 1989.
- Latzko J.W., Quality and Productivity for Bankers and Financial Managers, ASQC Quality Press, 1986.
- Leavitt J., Nunn P.D., Total Quality Through Project Management, McGraw-Hill, Inc.
- Lemprecht, J., ISO 9000: Preparing for Registration ASQC Quality Press, 1992.
- Lindsay, W.M., Petrick, J.A., "Total Quality And Organization Development", St. Lucie Press, 1997.
- Logothetis N., Total Quality Management (in greek), 1992.
- Munro-Faure L. and M., Implementing Total Quality Management, Financial Times: Pitman Publishing, 1992.
- Murphy, J.A., Quality in Practice, Gill & Macmillan, 1988.
- Nemoto, M., "Total Quality Control For Management: Strategies And Techniques From Toyota And Toyoda Gosei", Prentice Hall, 1987.
- Oakland, T.S., Total Quality Management, Heinemann, Oxford, 1989.
- Oakland, I.S., Total Quality Management, Heineman, 1989.
- Oakland J.S., Statistical Process Control: A practical guide, Heinemann: London, 1986.
- Ross P. J., Taguchi Techniques for Quality Engineering McGraw-Hill, 1988.
- Robinson, Modern Approaches to Manufacturing Improvement, Productivity Press, Cambridge, Massachusetts.
- Robson, G.D., "Continuous Process Improvement: Simplifying Work Flow Systems", New York: The Free Press, 1991.

- Soin, S.S., "Total Quality Control Essentials: Key Elements, Methodologies, And Managing For Success", McGraw-Hill, 1992.
- Shirland L.E., Statistical Quality Control with Microcomputer Application, John Wiley Sons, Inc. 1993.
- Spendolini, M.J., The Benchmarking Book, AMACOM, 1992.
- Stebbing L., Quality Assurance the Road to Efficiency and Competitiveness, 3rd edition, Ellis Horwood Ltd, Publication, 1993.
- Steeples M.M., The Corporate Guide to the Malcolm Baldrige National Award, ASQC, 1993.
- Tenner A., DeToro I., Total Quality Management-Trhee Steps to Continuous Improvement, Addison-Wesley Publ. Co., 1992.
- Tsiotras G., Quality Improvement (In Greek) Benos Publ., Athens, 1995.
- Watson, G.M., Strategic Benchmarking: How to Rate Your Company's Performance Against the World's Best, John Wiley & Sons Inc., 1993.
- Weaver C., TQM-A Step-by-Step Quide to Implementation, ASQC Quality Press, 1991.
- Wellemin, J., Customer Satisfaction Through Total Quality, Chartwell-Bratts 1990.
- Wilson P., Dell L. and Anderson G., Root Cause Analysis, ASQC Quality Press, 1993.
- Zairi, M., Behchmarking for Best Practice: Continuous learning through sustainable innovation, Butterworth Heinemann, 1998.

### **Related Academic Journals**

- International Journal of Operations and Production Management
- International Journal of Services and Operations Management
- International Journal of Business Performance Management
- Business Process Management Journal
- Journal of Quality Technology
- International Journal of Quality & Reliability Management
- Journal of Operations Management
- Total Quality Management & Business Excellence
- The TQM Journal
- Quality Management Journal
- International Journal of Productivity and Quality Management
- International Journal for Quality in Healthcare

### Related websites

- <a href="http://www.asq.org/">http://www.asq.org/</a> (American National Standards Institute's (ANSI)
- .www.quality.org (Associated Quality Consultants, Inc A large collection of free quality information.)
- http://www.bus.umich.edu/resource/nqrc/nqrc.html (National Quality Research Center, at University of Michigan)
- <u>www.acsi.asqc.org</u> (American Customer Satisfaction Index)
- <u>www.tqe.com</u> (Total Quality Engineering quality tools, principles, and techniques)
- <a href="http://www.nist.gov/">http://www.nist.gov/</a> (U.S. Government's National Institute for Standards and Technology)