

EM 507 Total Quality Management

Instructor: Gülser Köksal

Course Objectives: This course is designed to give students fundamentals of Total Quality Management with emphasis on contemporary quality planning, control and management approaches, implementations and criticisms.

Textbook: Goetsch, D.L. and Davis, S.B. *Quality Management*, Prentice Hall, 2006 (available at the reserve section of the library, Call Number: HD62.15 G64 2006)

Supplementary course material is available at METU-Online system (<http://online.metu.edu.tr>) for students registered for the course.

A Partial Reference List:

- Hoyle, D. *Quality Management Essentials*, Elsevier, 2007.
- Evans, J.R., *Quality and Performance Excellence: Management, Organization and Strategy*, Thomson South-Western, 2007.
- Summers, D.C.S., *Six Sigma: Basic Tools and Techniques*, Upper Saddle River, N.J. : Pearson/Prentice Hall, 2007.
- Taghizadegan, S., *Essentials of Lean Six Sigma*, Burlington, MA: Butterworth-Heinemann, 2006.
- Morgan, J.M and Liker, J. K., *The Toyota Product Development System: integrating people, process and technology*, New York: Productivity Press, 2006.
- Liker, J.K., *The Toyota way: 14 management principles from the world's greatest manufacturer*, New York: McGraw-Hill, 2004.
- Gryna, F. M., *Quality planning and analysis: from product development through use*, Boston: McGraw-Hill, 2001.
- Peach, R.W., Ritter, D.S., *The Memory Jogger 9000*, Massachusetts: GOAL/QPC, 1996.
- Kolarik, W. J. *Creating Quality: Concepts, Systems, Strategies, and Tools*, New York: McGraw-Hill, Inc. 1995.
- The Team Memory Jogger*, Massachusetts: GOAL/QPC, Joiner Associates, Inc., 1995.
- Brassard, M., Ritter, D.S., *The Memory Jogger II*, Massachusetts: GOAL/QPC, 1994.
- Evans, J.R., Lindsay, W.M., *The Management and Control of Quality*, West Pub. Co., 1993.
- Logothetis, N., *Managing For Total Quality: From Deming to Taguchi and SPC*, NY: Prentice Hall, 1992.
- Ciampa, D., *Total Quality: A User's Guide for Implementation*, Reading, Mass.: Addison-Wesley, 1992.
- Teboul, J., *Managing Quality Dynamics*, Englewood Cliffs, N.J.: Prentice Hall, 1991.
- Crosby, P.B., *Let's Talk Quality: 96 Questions You Always Wanted to Ask*, New York: Penguin Books, 1990.
- Covey, S.R., *The 8th Habit: From Effectiveness to Greatness*, Running Press Book Publishers, 2006.
- Covey, S.R., *The 7 Habits of Highly Effective People*, Simon & Schuster, 1989.
- Scholtes, P.R., *The Team Handbook*, Joiner Associates Inc., 1988.
- Crosby, P.B., *Quality Without Tears: The Art of Hassle-Free Management*, New York: Plume Book, 1984

Course Outline:

Introduction, total quality concept
Evolution of quality concepts and quality paradigms
Organization for total quality, process management
Quality teams and teamwork processes
Basic problem solving tools for quality improvement
Leadership and empowerment
Quality standards and award models
TQM implementation and case studies
Quality through improvement: Six sigma, lean six sigma, kaizen, 5S, SPC
Quality through planning and design: QFD, policy deployment, design for six sigma
Quality through innovation: TRIZ
Quality through IT: CRM
Project presentations

Course Conduct:

The students are required to do their reading assignments before attending the class. Class hours will generally be used for teamwork exercises, and discussions on the reading material. Students will form teams after the add-drop period. Projects, some homework and teamwork assignments will be performed by these teams.

Grading:

In-class activities	10%
Midterm exam	20%
Project	25%
Assignments	15%
Final exam	30%