Books:


Course Objective:

The purpose of this course is to study problems in production related to quality issues. A basic understanding of Quality Management and TQM practices is introduced early in the class. This is followed by a review of quality measures and quality costs. A final section is devoted to technical issues of quality management. Since this is an operations management course, emphasis is placed on technical issues of quality management as well as behavioral TQM practices. By the end of the class, students should be able to:

- Understand conceptual issues of quality management with particular emphasis on common cause and special cause variation
- Understand more specific tools, such as statistical quality control and reliability.
- Act in a consulting role on the topic of Quality Management by providing knowledgeable analysis of a particular company and by providing excellent oral and written communications of their analysis and recommendations.
- Critically evaluate the issue of international quality comparisons and the issue of proper program implementation.
- Develop quality management skills through actual practice of a specified project.

Course Requirements:

Students must complete readings from the required textbook. In addition, short cases or problems will be assigned each week for discussion the following week. Students who are unable to discuss the cases or problems may receive a substantial penalty on their final grade. Exam questions will be selected from readings, case discussion, lecture notes, and problems, therefore, it is incumbent upon the student to keep up with the work on a weekly basis.

Students must also complete a written report on a local company case study. The case study should involve process analysis in which quality of product, quality of production, or quality of service can be improved. These will be individual reports. Group work will be devoted to planning and executing a project due the last week of class. The project should be conducted in accordance with ISO 9000 preparations. An oral presentation describing the project will be completed on the last night of class. Details will be provided in class.

Course Grading:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Exams (2)</td>
<td>50%</td>
</tr>
<tr>
<td>Written Report</td>
<td>30%</td>
</tr>
<tr>
<td>Project Execution &amp; Case Analyses</td>
<td>20%</td>
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<tr>
<td>Total</td>
<td>100%</td>
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In general, written reports will be graded for content, organization, analytical skill, presentation detail, and proper use of language skills. Oral reports will be graded for use of visual aids, organization, content analysis, content summarization, content accuracy, presentation poise, and presentation projection. Exams will contain objective questions, essay questions, and/or problems. Points may be deducted from the final grade for failure to participate in case analysis and problem review. Make-up exams will be given only in the event of a verifiable excuse. In general, make-up exams are more difficult than regularly scheduled exams.

TENTATIVE SCHEDULE
(R=Read; L=Responsible for Lecture Notes)

Week 1 Ch. 1, 2, 3, Ch 9 (pg. 516-526) (R) Quality Concepts and Philosophies

Week 2 Ch. 4 (R); 5, 6 (L) TQM; Customer Focus, Leadership, and Strategic Planning, HRM & Teamwork

Week 3 Ch. 7 (R) Product and Process Design, Continuous Improvement, Reengineering, and Benchmarking

Week 4 Ch. 8 (R) Performance, Cost, Measurement,

Week 5 Exam (In-class)

Week 6 Ch. 11, 12 (R) Statistics; QC Practices and Technology; Possible Field Trip

Week 7 Ch. 10, 13 Six Sigma and Tools for Process Improvement

Week 8 Ch. 14 (R) Statistical Process Control

Week 9 Process analysis report due; Problem Review

Week 10 Final Exam (Take home)

Week 11 ISO 9000 Project Execution

Brief case assignments or problems will be due each week. An additional option is to add field trips to local companies implementing TQM.