

ETM 560/660
Quality Management

Time and Place: Reference ETM Web Site
<http://www.pdx.edu/engineering-technology-management/course-listing>

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Teaching Assistant: To be announced in class

Textbook:

- Thomas Pyzdek and Paul Keller, "The Handbook for Quality Management: A Complete Guide to Operational Excellence," McGraw-Hill, 2013, second edition (HB)

Supplementary Case Studies:

- A Harvard Business Publishing course pack will be provided the first day of class. Use the course URL provided by your instructor to access your supplemental course materials. There are 4 case studies included in the course pack. Each case study will be the focus for QIT reports and discussions.

Objectives of the Course: The objective of this course is to teach you Quality Management techniques and concepts. The specific objectives are:

- Develop the conceptual framework for companywide quality management.
- Integrate Quality Management with strategy, operations, organizations, systems and people.

Familiarize the students with state-of-the-art research.

Pedagogy: The concepts of quality management are taught using a combination of classroom lecture, text readings, case studies, class dialogue, and group project. A significant amount of interaction is expected during lectures, discussions and in the development of quality improvement using quality improvement teams (QIT). This allows the students to research and analyze the concepts; thereby, giving students confidence in using the concepts taught in the course. The concepts for this course are illustrate and extend through the use of case studies. It is expected, the QIT will report and lead class discussion. If you are having trouble understanding the concepts, e-mail me, *but not within 24 hours of class*. I'll be

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happy to respond, but please know I am not always immediate available because I am also a consultant and maybe traveling.

General Policies:

- *Recording:* I do allow audio-taping, but not visual recording of my classes.
- *Reaching me:* please use my PSU e-mail account and CC the TA and include 545/645 in subject line Please allow a 2 day turn around to your email. Note: If you email the day of the class, do not expect a reply.
- *Attendance:* If you have registered for this course, I expect you to attend all the classes. If you miss a class, it is your responsibility to get the material we covered from a classmate.
- *Absences:* As an adult, I expect you will miss a class only when absolutely necessary (e.g., illness or traveling work assignment). However, I expect homework to be submitted by email. There is no makeup work.
- *Class discussion:* I expect everybody to participate and that you will respect others (see Computer/Smart Phones).
- *Coursework:* Late work is not accepted, and all graded work elements are required to pass the course.
- *Class materials:* Bring the text and all other materials to class on the days there are assignments on them, as well as any materials we were not able to cover in preceding classes.
- *Computers/Smart Phones:* If your computer is open, I will expect that you are using the computer for class purposes. If I see you surfing the internet or texting, I will stop teaching and ask you to close your computer for the remainder of the class. I also expect your phone to be on vibrate or off. If you have to take a call, then please remove yourself from the classroom to answer it. During breaks, you may use your technology devices as you wish.

Grading

The elements of your final grade based on individual and team contributions, which are weighted. Use any source of information that is appropriate in analyzing your individual homework assignments or group projects. Such sources may include books, journal articles, conference presentations, Internet, interviews, questionnaires, etc. Make sure to acknowledge all of your information sources properly using the guidelines given in the document titled "Academic Honesty Policies and Procedures", which can be found at the following:

http://www.pdx.edu/sites/www.pdx.edu/education/files/gse_handbook_student_integrity.pdf

PSU takes plagiarism very seriously. If you are found plagiarizing, you will receive a zero on the assignment. In addition, you may receive an "F" for the course and/or be expelled from the university.

Individual Contribution (50%): Credit is given based on each individual's understanding of the concepts taught in the course and their overall contribution to the class discussion. There are two elements that contribute to the individual's grade.

1. ***Class Contribution (10%):*** Each individual is responsible for reading the chapter material and answering the case study (CS), directed reading questions or problems assigned for the week. You may work with someone else; however, your answers should be completely your own. For the same reason, do not violate the honor code by giving your answers to anyone else or answering their questions for them. Class contribution is based on attendance and individual contributions, such as the following:

- Providing thoughtful insight, questions and awareness pertaining to the course text and selected readings.

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- Does the comment contribute to class process and participant understanding of the concept under discussion?
 - Making observations that integrate concepts and discussions.
 - Does the comment enlighten the instructor and/or class members?
 - Does the comment provide a new angle on the instructor's presentation of a concept that makes grasping the point easier?
 - Does an example provide a good demonstration of a concept and thus assist others to comprehend how things work?
 - Citing relevant personal examples.
 - Asking key questions not only of the Professor but also your colleagues that lead to learning discussions.
 - Asking short and concise questions that may provide concepts, issues, or practices from your experience, even if it challenges or disagrees with the course material and perspectives.
2. **Midterm and Final Exams (40%):** A midterm and final examination will be administered. Each exam is worth 20%.

Team Contributions (5 @ 10% for 50%): Credit is given based on each Quality Improvement Team's overall contribution to the class and understanding of quality management. Quality management is about leadership and functioning as a cohesive unit toward a common goal - quality. Grading is based on three evaluation factors: 1) Ability to lead and answer class questions and 2) the report itself.

- **The Discussion. Each QIT team will lead the quality circle discussion at least once.**
Visualize you have been requested by executive management to prepare a presentation on the problems and issues described in the case study. It is your job to lead a dialogue on problems the company facing and how you propose to resolve them using the applicable quality management tools and techniques. It is expected one QIT will lead the discussion and help answer question raised by executive management (i.e., class).
Notes:
 - 1) It is expected the QIT leading the discussion will prepare slides for the class.
 - 2) Since each team prepared a written a report on the company's problems and issues; it is expected by the other teams will contribute to the dialogue in areas that may have not been considered as well as support the analysis.
- **The Quality Improvement Report.** QIT Teams are expected to provide an insightful analysis of the quality management principle/topics being taught when answering the case study questions. It is expected the team will support and extend the concepts through supplemental external research.
 - **Scope (thoroughness).** Is the report well organized with an effective introduction and conclusion? Does the paper address the major points of the case study?
 - **The richness of observation,** Does the report describe the events that lead to the problems occurred?
 - **Analysis and recommendations.** Did you analyze why the problem occurred not merely describing what consequences resulted? Did you find any published research that supports your analysis? How are your findings related to the course material? Did you seek multiple causes and review alternatives rather than single causes for an outcome? Do your recommendations reinforces and build upon one another.
 - **Conceptual understanding.** Did you utilize concepts from the text to analyze and explain events, actions, consequences, and support recommendations? Does the report in other ways demonstrate that you have a grasp of the conceptual material? (e.g., proper labeling of events and factors.

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Grades are based on the following: A = 100-94, A- = 93-90, B+ = 89-87, B=86-84, B- = 83-80, C+ = 79-77, C = 76-74, C- = 73-70. D+ = 69-67, D = 66-64, D- = 63-60, F below 60

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Schedule:

WK	Date	Topic	Readings	Team Work/Guidelines
1		Course Overview/Introduction to Quality Management	Ch 1,2,and 3 (HB)	Pick Quality Improvement Teams (QIT) QIT-1 Manfield Coasting Co. LTD.: Quality Management as the Winning Formula
2		QIT-1 Discussion Customer Focus and Benchmarking	Ch 4, 6, and 7 (HB)	
3		Planning and Leadership for Quality Management and Human Resource Management	CH 5, 18, 19 and 20 (HB)	QIT-2 - Porcini's Pronto: Great Italian Cuisine without the wait
4		QIT-2 Discussion Organizational Assessment	CH 8, (HB)	
5		Quality Audits and Supply Chain Management Guest Speaker	CH 10, and 11 (HB)	QIT-3 Texas Instruments: Cost of Quality
6		QIT-3 Discussion Midterm		
7		Continuous Process Improvement through Projects (Define)	CH 12 and 13	QIT-4 Samsung Electronics: Using Affinity Diagrams and Pareto Charts
8		QIT-4 Discussion Process Control: Measuring Variation and Process Capabilities (Measure)	Ch 9 and 14 (HB)	
9		Understanding Variation through Value Analysis (Analyze & Improve/ Design) Guest Speaker	CH15 and 16 (HB)	QIT-5 - Ritz-Carlton Hotel Company: The Quest for Service Excellence
10		QIT-5 Discussion Control and Verify	CH 17 (HB)	
11		Final Exam		

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