

Austin Peay State University

School of Technology and Public Management

Professional Studies Department

Course. PTMA 3400

Professor: Becky J. Starnes

Course Title. Introduction to Quality Management

Course Credit: 3 Hours

Office Hours. As posted

Telephone (931)-221-1443

Course Description. This course is designed to inspire students to increase their expertise in the practices and principles of quality. The course begins with a detailed study of quality philosophy and then proceeds to the study of quality applications.

It's Expected Students will:

1. Understand the Benefits of Quality

- a. Describe the benefits of studying quality for you personally, for organizations and their customers, and for society in general.
- b. Define the terms and concepts: quality and profitability, benefits of quality, external and internal customers.

2. Know the Evolution of Quality

- a. Describe the key events in the evolution of quality.
- b. Define the terms and concepts and relate the contributions of individuals: quality, guild, craftsmanship, Frederick Taylor, Dr. Walter Shewhart, total quality, quality standards (military and ISO 9000), Baldrige National Quality Program.

3. Comprehend Total Quality Management

- a. Identify and describe the key components of Total Quality Management (TQM).
- b. Differentiate between the TQM philosophies of six quality experts and two quality approaches.
- c. Define or explain the terms and concepts: Total Quality Management; customer satisfaction; voice of the customer; partnering with the customer; specifications; continuous improvement/kaizen; continuous process improvement; Plan-Do-Check-Act cycle; supplier partnerships; teams; empowerment; communication process; quality philosophies of Deming, Juran, Ishikawa, Feigenbaum, Taguchi, Crosby; and the quality approaches of the National Quality Program and Six Sigma.

4. Comprehend Process Management

- a. Explain the role of process management in Total Quality Management.
- b. Define the terms and concepts: process, cycle time reduction, variation, common/special causes, process management and points of control.

5. Comprehend and Apply the Quality Tools

- a. Explain how the basic quality tools can be used to help improve processes.
- b. Define the terms and concepts: flowcharts/process maps, check sheets, Pareto charts, cause-and-effect diagrams, scatter diagrams, control charts, histograms, benchmarking, design of experiments, and failure mode and effects analysis.

6. Understand Quality Deployment

- a. Explain how organizations approach Total Quality Management deployment.
- b. Define the terms and concepts: quality culture, quality strategy, vision statement, mission statement, goals, objectives, quality plan, quality assessment, quality function, and quality system.
- c. Demonstrate how to conduct a quality audit.

Required Curriculum Materials

1. *Quality 101, ASQ's, Foundations in Quality*, American Society for Quality. (This is an on-line textbook. Each student receives an access code from the instructor.)
2. *Empowerment Takes More Than a Minute*, Ken Blanchard, John P. Carlos and Alan Randolph, Berrett-Koehler Publishers.

Method of Facilitation. Course sessions include the application of a variety of methods and tools to include informal lectures, small and large group discussions, team exercises, case studies, and exams. **Written assignments** may include progress checks, case studies, a book review, a quality journal, a storyboard, or a quality notebook. **Speaking assignments** may include an individual Internet tour and a team presentation. **Research projects** include an annotated bibliography on a quality topic and/or participation in a process improvement project.

Evaluation Standards.

Multiple-choice tests. Each test is graded using a 100-point scale. Tests may cover the material in the readings, lectures, case studies and films. Exams include:

- a. Pre-test (Score not averaged into the student course grade)
- b. Six module quizzes
- c. Comprehensive post-test

Presentations, Written Assignments, and Quality Notebooks are evaluated in accordance with the attached evaluation guidelines. **Peer Evaluations.** Students evaluate each team member's contribution to the team research project.

Summary*

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|---|------------|
| Six Module Quizzes (Objectives 1-6) (100 points each) | 600 points |
| Quality Journal (Objectives 1-6) | 100 points |
| Book Review (Objective 3) | 100 points |
| Internet Tour (Objective 1) | 50 points |
| Mastery Test (Objectives 1-6) | 100 points |
| Research Project Briefing (Objectives 1-6) | 100 points |
| Research Project Storyboard (Objectives 1-6) | 100 points |
| Peer Evaluations (Objective 3) | 100 points |
| Quality Notebooks (Objectives 1-6) | 100 points |
| Annotated Bibliography (Objectives 1-6) | 100 points |
| Course Participation and Attendance | 100 points |
| Total points | 1,550 |

*Not all of the assignments summarized above will be required. The instructor will select differing assignments from this list each time the course is offered.

Grading Scales

To receive university credit and earn the stated letter grade students:

- Must pass all six course objectives and earn at least 90 percent of the points available for an A.
- Must pass five course objectives and earn at least 80 percent of the points available for a B.
- Must pass four course objectives and earn at least 70 percent of the points available for a C.
- Must pass three course objectives and earn at least 60 percent of the points available for a D.
- An average of 59 percent or less earns an F.

To pass an objective in this course a student must earn 70 percent of the possible points for that objective.

Class Policies

Attendance. Each student should keep the professor informed of his/her attendance issues. Per the 2004-2005 Austin Peay State University Undergraduate Bulletin: "Class attendance is a key attribute to academic success . . . the University requires faculty too report and students who have never attended class (FM—Failure, Never Attended) or those students who stop attending class and are no longer receiving instruction (FA—Failure, Stopped Attendance). Students missing four classes or more will receive a grade of FA.

Absence from Announced Tests and Examinations. Per the 2004-2005 Austin Peay State University Undergraduate Bulletin: “Students who are forced by circumstances beyond their control to be absent from announced tests and examinations should request approval from the instructor. At the discretion of the instructor, the student will receive the grade of I, F, or FA. The grade of I may be changed based on a late test or examination.

Children. Per Fort Campbell Education Center policy, children are not allowed in classrooms or other areas of the education center.

Academic Dishonesty. Per the 2004-2005 Austin Peay State University Undergraduate Bulletin: “Academic dishonesty may be defined as any act of dishonesty in academic work. This includes, but is not limited to;

1. Plagiarism. Intentionally or knowingly using sources of another in an academic exercise without proper identification of the source(s).
2. Cheating. Intentionally using or attempting to use unauthorized materials, information, or study aids in any academic exercise; helping or attempting to help a student commit an act of dishonesty, including buying, selling, or transmitting a copy of any examination or test before it shall have been administered; allowing another to copy information during an examination or other academic exercise.
3. Fabrication. Intentional falsification or invention of information or citation in an academic exercise.

Students guilty of academic misconduct, either directly or indirectly through participation or assistance, are immediately responsible to the instructor of the class. Penalties for academic misconduct will vary with the seriousness of the offense and may include, but are not limited to, a grade of F on the work in question, a grade of F in the course, reprimand, probation, suspension, and expulsion.

Disability Policy. Any student who has a disability that may affect his/her academic performance is encouraged to make an appointment with me to discuss this matter or to contact Disability Services at telephone extension 221-6230; voice 221-6278p voice tty.

Caveat. The above schedule and procedures are subject to change in the event of extenuating circumstances.

Book Review Guidelines

Write a four-page review of the assigned book on empowerment. Note this is a book *review* not a book *report*. Therefore, you need to analyze the book as well as simply explain it. Type the paper double-spaced using the format below.

Introduction (25 points). Include the book's title, author, theme, and why written.

Contents (25 points). Identify the author's major arguments and conclusions.

Evaluation (40 points). Identify the book's strengths and weaknesses.

Conclusion (10 points). Make a recommendation of whether or not to read this book. If you recommend the book, identify the audience that would be interested in reading it. Note. One point is subtracted for each typographical, grammar, and punctuation error made.

Guidelines for Completing Internet Tours

Each student (or a team of students) briefs their classmates on a quality professional association using the association's home page. This assignment is graded on a pass/fail basis for a total of 50 points.

Guidelines for Quality Journal

To close the gap between theory and practice students will create a Quality Journal containing their reflections of the subject of quality. Entries may consist of personal opinions, reflections on receipt of good or poor quality services and products, and examples of how the student has applied quality practices to the improvement of his/her personal and professional life. Journals will be graded based on (1) the number of entries per week, (2) the quality of the content, and (3) the use of correct grammar, punctuation and spelling.

Continuous Improvement Research Projects

Student teams apply a continuous improvement process model to the study and analysis of a "real-world" process.

Evaluation Guidelines for Team Research Project Each team will select a process to analyze and identify areas for improvement. This project consists of a team oral presentation and a team storyboard (which will fulfill the requirement for a written report).

Team Oral Presentation. Each team will make an oral presentation to management (which will be me and your classmates or the process owner) regarding the process studied and your results. The format for the presentation is the Quality Improvement Story (Storyboard). The oral presentation must be made using some type of multimedia/computer support equipment. Each team member must personally brief a portion of the presentation. Team presentations will be evaluated using the business presentations grading sheet.

Team Storyboard (Written Report). Each team will create a storyboard to display along with your oral presentation. The storyboard will be turned in at the end of your oral presentation. Storyboards will be assessed for effective presentation of the process, tools used, and results achieved. Storyboards will be designed around the format presented in class and in your textbook but individual team, creativity is allowed and encouraged. Each team member must personally prepare some part of the storyboard. Write in the name of the person designing each individual panel of the storyboard on the top right hand corner of each panel. Storyboards will also be graded for proper grammar, spelling, professional layout and design.

Annotated Bibliography Guidelines

Prepare a fifteen item annotated bibliography on a quality topic that you've selected from the list of key terms and concepts identified in the *Quality 101* textbook. Bibliographies should use the format below.

Annotated Bibliography on Self-Directed Work Teams (Name of your topic)

Academic Journals

Gilbertson, Thomas F. (1999). Self-Directed work Teams in Marketing Organizations. *Journal of Hospital Marketing*. Vol. 13, Issue 1, pp. 87-96. As marketing organizations move toward the 21st century they are becoming concerned with the development of self-directed work teams. Marketing organizations that have informed, motivated, skilled, trained, and committed employees will out perform organizations, which operate in the traditional manner. Many self-directed work teams have grown out of the quality circles. The goal of these teams is to increase employee involvement in decisions of the organization to the greatest extent that employee's knowledge and training allows (p. 87).

Start your second journal article here.

Newspapers

Doe, John. (1992, January 5). Self-Managing Teams Emerge in the Banking Industry. *New York Times*. p. 3C. In this article, the author defines a self-managing work team as a group of "5-20 multiskilled workers who rotate jobs and produce an entire product or service" (p. 4C). He goes on to explain that self-managing teams usually are given access to resources needed to perform the job and are empowered with decision-making authority. He also explains that self-managing team members take over managerial duties such as scheduling work or vacations or ordering materials and work with minimum supervision.

Start your second newspaper article here.

Magazines

Raggedy, Ann. (1993, December). The Stages of Team Development. *Quality Progress*, pp. 12-13. Tucker found that all team members tend to go through five stages of development known as forming, storming, norming, performing, and adjourning. The forming stage occurs when the team members first meet and are acquainted. During the storming stage, people become more assertive and disagreements often occur. Forming is the stage where the team members begin to resolve their conflict and start accomplishing their tasks. When a team hits the performing stage, they have learned how to resolve conflicts and become focused on full task accomplishment. Finally, the adjourning stage occurs when the team has accomplished their task and disbands.

Start your second magazine article here.

Books

Scholtes, Peter. 1988. *The Team Handbook. How to Use Teams to Improve Quality*. Joiner Associates, Inc., Madison WI. The purpose of this book is to help project teams succeed in improving quality and productivity, and in all their efforts to improve (p. I-1). Hints on how to set-up and assign teams, what to look for as the project unfolds, and how to be better team leaders and members are provided. The author writes that that "participants in a successful project must also know how to work as a team, plan, conduct good meetings, manage logistics and details, gather useful data, analyze the data, communicate the results, and implement changes " (p. I-2).

Start your second book entry here.

Internet

Lam, K.D. & Watson, Frank. (199X). Transitioning to Self-Directed Teams. {On-line}. Available <http://aaaa.org/sdt> {2000, January 12}. The authors explain a self-directed team is fully responsible for producing a well-defined segment of finished work, whether a product or service. Each member shares responsibility for the work done by the team. Benefits include better-satisfied customers, higher quality products and services, greater flexibility, increased commitment from employees and greater speed to market.

Start your second Internet entry here.

Evaluation Standards for Annotated Bibliography

Content (50 points)

Presented a concise, but fully developed, summary of the purpose each article or book
Summaries are written in the student's own words. Not cut and paste from electronic sources.
Each summary consists of a minimum of five lines.

Organization (15 points)

Bibliography has a title and student name
Used headings to separate the different sections
Authors are listed alphabetically under each major category

Style (15 points)

Used appropriate reference format for citing documents
Consists of correct grammar, spelling, and punctuation

Mechanics (20 points)

Document has the standard COBA title page
Margins are consistent
Bibliography is single-spaced within paragraphs and double-spaced between paragraphs
Bibliography is typed neatly and cleanly using a word processing package
Avoided leaving a single line of a paragraph at the top or bottom of a page
Avoided placing a heading at the very bottom of a page
At least three documents come from academic journals
At least two documents come from newspapers
At least two documents come from magazines
At least one document is a book
No more than five documents retrieved from the same source
Bibliography has a total of 15 entries

Grading

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| 100 percent = no mistakes for that section | 95 percent = 1 mistake for that section |
| 85 percent = 2 mistakes for that section | 75 percent = 3 mistakes for that section |
| 65 percent = 4 mistakes for that section | 55 percent = 5 mistakes for that section |

The 40 Percent Rule also applies. If there are more than five typographical, grammatical, or punctuation errors, 40 percent of the total number of points earned are subtracted from the total grade.

Total Points _____ Grade _____

Guidelines for Quality Notebook

The quality notebook serves as a study guide for all future evaluations. Each notebook consists of a three ring binder with the following tabs and contains as a minimum:

Cover Sheet

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Tab 1. Course Overview PowerPoint Slides. Course charter (syllabus)

Tab2. Pretest/Posttests/Mastery Test

Tab 3. Module 1: Quality Benefits. Course of Internet text. Copy of module PowerPoint slides. Related course handouts

Tab 4. Module 2: The Evolution of Quality. Course of Internet text. Copy of module PowerPoint slides.
Related course handouts

Tab 5. Module 3: Total Quality Management. Course of Internet text. Copy of module PowerPoint slides.
Related course handouts

Tab 6. Module 4: Process Management. Course of Internet text. Copy of module PowerPoint slides.
Related course handouts

Tab 7. Module 5: Quality Tools. Course of Internet text. Copy of module PowerPoint slides. Related
course handouts

Tab 8. Module 6: Quality Deployment. Course of Internet text. Copy of module PowerPoint slides.
Related course handouts

Tab 9. Glossary. Copied from Internet text.

Tab 10. Index. Copied from Internet text.