MANAGEMENT 481.01 Quality Assurance Management Spring 2008

Instructor: Dr. Sower Of	fice Hours: Tu 10:00 – 11:00
Office: 236H SHB	2:00 - 2:30
Phone: 294-1272	3:00 - 4:30
FAX: 294-4284	W 1:00 – 4:00
	Th 10:00 – 11:00
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e-mail: sowerv@shsu.ed	3:00 - 3:30
Home Page: http://www.shsu.edu/~mgt_ves	5:00 - 6:00 @ TUC
	Others by appointment

REQUIRED TEXTS:

Text will be provided on line.

OTHER INSTRUCTIONAL MATERIAL:

Supplementary Materials handed out in class by the instructor.

COURSE DESCRIPTION:

A study of current topics in quality assurance management to include total quality control (TQM), statistical quality control (SQC), statistical process control (SPC), teams and quality circles, problem solving, continuous improvement, and Deming's methods. Emphasis will be placed on the systems approach to quality assurance.

Prerequisites: BAN 363, MGT 475 (or IT 478)

COURSE OBJECTIVES:

At the end of the semester, students will

- 1. better understand current topics in the management of product and service quality.
- 2. better understand the roots of modern approaches to the management of quality.
- 3. have had the opportunity for application of the course material in realistic case situations.
- 4. understand how to use the quantitative and non-quantitative quality tools and systems such as benchmarking, process capability study, control charting, Pareto analysis, gage R & R, experimental design, and automatic data collection.
- 5. be able to use *NWA Quality Analyst* in SPC applications and *Minitab* in DOE applications.

COURSE REQUIREMENTS:

1. General Teaching Approach

This class will be taught using a mentoring approach. The instructor will introduce the topics and provide explanations and lead class discussions of the material. In-class exercises, outside research, and homework will be assigned for student practice. The instructor will welcome questions about any aspect of the

material any student wishes to discuss. If no questions are received, the instructor will assume that the material has been mastered and will move on to the next topic.

The student is responsible for learning. How much each student learns in the course will be largely a function of the time spent on reading the chapters, doing the homework, and asking questions in class or during office hours. Grades earned provide feedback to the student about their level of mastery of the material.

On-line tutorials and supplementary materials are also available through the MGT 481 web site.

Students will take the role of internal/external consultants when doing class projects and preparing research reports.

2. Text

The text will be provided on the MGT 481 web site. Students are expected to complete the readings prior to the meeting of the assigned week and to be prepared to discuss the readings in class. Class meetings will be informal, and discussion-oriented to the extent possible.

3. Outside readings

Articles and web sites will be assigned to supplement the text readings. These will be the subject of class discussions and will be covered in the examinations.

4. Examinations

- a. There will be two (2) written examinations plus a final examination covering the text, lectures, outside readings, homework assignments, cases, and class discussions. The final examination **IS** comprehensive.
- b. Students missing either Examination 1 or 2 and who have notified the instructor in advance of the scheduled exam date will make-up the missed examination by counting the comprehensive final examination double. Under no circumstances may a student make up both semester examinations.

5. Groups

The class will be divided into small groups (2-3 members). The groups will be given some time to meet during class. Some groups may find a need for additional outside meetings (virtual meetings are OK). Several in-class exercises and case studies will be accomplished in the groups. Members must be present to receive credit for these exercises. The purposes of the groups are:

- 1) Facilitate a cooperative effort within the groups (such as group study for exams, help with homework, discussion of case) in order to maximize each student's performance in the course.
- 2) Provide feedback to the instructor about topics which might be confusing and require extra emphasis. This allows student participation in the management of the course.
- 3) Work together on in-class exercises and in-class/outside-class case studies. Presentation of exercise results may be written and/or oral.

6. Attendance

- Regular attendance and participation is expected. Those missing 3 class hours (2 classes) or fewer will receive the benefit of rounding up when their final average is calculated at the end of the semester. Students missing 15 hours (5 classes) or more will have 5 points deducted from their final average. For the purposes of this policy, there is no difference between an "excused" and an "unexcused" absence. In some cases a web-based assignment may compensate for an absence.
- 7. The participation grade is comprised of participation in special in-class events (e.g. simulations, exercises), presenting homework solutions, and informally presenting quality assurance related-topics in class as well as written assignments to be completed outside of class (e.g. case studies) and turned in for a grade. In the event of an absence, partial credit may be obtained by completing the on-line lesson that covers the material missed.
- 8. Electronic media will be used in this class. Agendas will be posted weekly to the MGT 481.01 home page. Some information may be sent via e-mail. You must establish a computer account at the beginning of the semester if you do not already have one. Send me an e-mail from the account you wish me to use to contact you by 1/24/08. You are responsible for all information posted to the MGT 481.01 home page.
- 9. Disabled Student Policy: It is the policy of Sam Houston State University that no otherwise qualified disabled individual shall, solely by reason of his/her handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any academic or Student Life program or activity. Disabled students may request help with academically related problems stemming from individual disabilities from their instructors, school/department chair, or by contacting the Chair of the Committee for Continuing Assistance for Disabled Students and Director of the Counseling Center, Lee Drain Annex, or by calling (936) 294-1720.
- 10. Religious Holiday Policy: Section 51.911(b) of the Texas Education Code requires that an institution of higher education excuse a student from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence.

University policy 861001 provides the procedures to be followed by the student and instructor. A student desiring to absent himself/herself from a scheduled class in order to observe (a) religious holy day(s) shall present to each instructor involved a written statement concerning the religious holy day(s). This request must be made in the first fifteen days of the semester or the first seven days of a summer session in which the absence(s) will occur. The instructor will complete a form notifying the student of a reasonable

timeframe in which the missed assignments and/or examinations are to be completed.

COURSE GRADE:

The final grade is comprised of the following elements:

2 Exams (100 points each) 200 points Final Exam 100 points

Case Studies, Written Assignments

Participation (Appx.) 200 points

Total 500 points

Final grade calculation: 450 - 500 points = A

400 - 449 points = B 350 - 399 points = C 300 - 349 points = D

below 300 points = F

NOTE: Final grades will not be "curved." Students may request extra credit assignments after Exams #1 and #2 are returned. These assignments are due one week after the graded exams are returned. No late extra credit assignments will be accepted.

This class may be taken for graduate credit. Graduate students will complete an additional assignment involving library and field research which will be worth 100 points.

Other important dates:

1/24/08 Deadline for sending e-mail to instructor.

3/7/08 Last day for dropping Spring Semester courses without grade of F.

3/10-3/14 No class - Spring Break.

TENTATIVE SCHEDULE

Discussion Topic	Group Topic
What is Quality?	Quality Definitions
Introduction to NWA Quality Analyst	
Strategic Quality Management	
The Dimensions of Product & Service Quality	Product Benchmarking
Product and Service Design Quality	
Innovation and Creativity in Quality	
Quality Systems	
Product, Process and Materials Control	
Examination I	
Design of Experiments	Minitab
Quality Improvement Tools	NWA Quality Analyst
The Problem Solving Process	
Metrology, Inspection and Testing	
Statistical Process Control	NWA Quality Analyst
Examination II	
Acceptance Sampling	
Quality Costs	
Quality Management Principles	
Quality Auditing	
Human Factors	

Final Examination