

MGT 475.02
Operations Management
Spring 2008

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Office Hours: Tu 10:00 – 11:00
2:00 – 2:30
3:00 – 4:30
W 1:00 – 4:00
Th 10:00 – 11:00
2:00 -- 2:30
3:00 – 3:30
5:00 – 6:00 @ TUC
Others by appointment

INTERNET:

e-mail: sowerv@shsu.edu
Home Page: http://www.shsu.edu/~mgt_ves

REQUIRED TEXTS:

Heizer, J. & B. Render. *Operations Management*. 8th edition. Upper Saddle River, NJ: Prentice Hall, 2006. (Be sure your copy comes with the free Student CD in the back which contains Weiss, H. *POM/QM for Windows*, v. 3.0, 2006.)

COURSE DESCRIPTION:

This course addresses issues pertaining to the operations function within manufacturing and service firms competing in a global environment. The relationship of operations to other organizational functions will be investigated. Topics include decision making, project management, forecasting, capacity planning, facilities design and location, process and product design, inventory management, and quality assurance.

Prerequisites: MGT 380, BAN 363

GENERAL COURSE OBJECTIVES:

1. To provide coverage of current factors of production and techniques applied in the design and operation of productive organizations.
2. To identify current issues faced by production and operations managers.
3. To provide opportunity for application of the course material in realistic case situations.

SPECIFIC COURSE OBJECTIVES:

1. Acquire factual knowledge (terminology, methods, trends) about operations management.
2. Learn fundamental principles, and theories.
3. How to apply course material to improve thinking, problem solving, and decisions.
4. Develop specific skills, competencies and points of view needed by professionals in operations management.

COURSE REQUIREMENTS:

1. General Teaching Approach

This class will be taught using a mentoring approach. The instructor will introduce the topics and provide explanations of the material. Then 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 are also available through the MGT 475 web site for a number of topics.

2. Text

Students are expected to complete the readings prior to their being discussed in class.

3. Weekly agendas will be posted to the MGT 475 web site. **Check this site regularly- you are responsible for everything posted on this site.**

4. Homework Problems

This is a quantitatively oriented course. Homework problems will be assigned for most topics covered. Homework solutions will be made available for downloading through the MGT 475 course web site. Students will be selected to present their solutions to homework problems to the class. The presentation will be graded. If you are absent when you are scheduled to present a homework problem, your presentation grade will be zero. If you fail to return the complete homework packet after your presentation your grade will be zero until all materials are returned at which time your grade will be reduced by 20%. There may not be enough homework problems for everyone to present. If you do not present a homework problem *because there are more students than opportunities*, your final grade will be calculated on the basis of 490 points instead of 500 points. **Consider the homework problems to be sample examination questions.**

5. Quality Circles/Case Studies

The class will be divided into small groups called quality circles (QC's). The purposes of the QC's are to:

- 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. Research has shown that the effective use of study groups can increase student performance by a half letter grade.
- 2) Enable group analysis of the case study.

Each student in the Quality Circle MUST maintain an individual journal of their participation in group meetings and their contribution to the final report. Entries for group meetings MUST include all attendees *by name*, place and time of meetings, and topic(s) discussed. Individual work on the

case must also be documented. The last entry in the journal must be “My contribution to this case was...”

Case study reports are to be typed using standard business report format. Detailed information, raw data, computer printouts should be included in appendices to the report. One point will be deducted for each typographical error, so pay attention to proofreading. **Cases are due at the beginning of class on the due date—no late case study reports will be accepted. ONLY group case reports will be accepted - you must join a QC in order to receive credit for the cases.**

Individual cases will NOT be accepted.

Virtual group meetings are acceptable. Group members should exchange telephone numbers and e-mail addresses. **Provide me with a list of group members, telephone numbers, and e-mail addresses by 1/31/08. The work breakdown structure and Gantt chart for your project is due on 2/21/08.**

General Advice for Case Study:

When assigned a project, you must become an expert on the process, product, industry, etc. that is the subject of the project.

When using a quantitative tool, you must follow the process, select the right model, and assure that the assumptions are met.

When provided data and information, always validate it to the extent possible before using it in your analysis.

First, be sure to answer the question you were asked. Extra work done after that is good. But if the question is not answered first, the extra work is largely useless.

Your job is to convince a decision maker that your work is valid and can be used in further decision making. That means you must write for your intended reader, explain all terminology and methods in ways your reader can understand, and you must justify how you arrived at your recommendation.

These are fundamental keys to doing good managerial staff work.

6. Computer Accounts

Each student must establish access to the Internet. The MGT 475 web site will be used as a primary means of student-instructor communication. Students should, **at a minimum**, check the web site at the beginning of each week. E-mail (available 24 hrs. per day) is considered to be a form of "virtual office hours." I try to answer all e-mails within 24 hours.

7. Examinations

a. There will be three (3) regular examinations covering the lectures, homework assignments, and class discussions plus a final examination. Homework and class discussions will be emphasized on the regular examinations. The Final Examination emphasizes applications and **IS** comprehensive and open book. **Calculator sharing and book sharing are not allowed.** Professionals bring all their tools with them. **BE PROFESSIONAL!** Students arriving more than 15 minutes late on a scheduled examination day will **NOT** be allowed to take the examination.

b. There will be one quiz and it is attached to this syllabus. It is a take-home quiz about the syllabus. Turn this quiz in for a grade on **1/24/08.**

c. The comprehensive final examination covering all course material will count double (200 points) for those students who have missed one of the regular exams in the course. (Final Exam review is attached.) **This is available ONLY for significant cause and ONLY if the instructor is notified in advance of the exam that is missed.** If your final examination grade is better than your grade on

either exam I, II, or III, I will replace your exam I, II, or III grade with the final examination grade.

d. Students who miss 2 or more of the regular examinations will fail the class.

8. Attendance

Regular attendance and participation is expected. Students who miss 3 class hours (two class days) or fewer will have their grade averages rounded up when calculating the final grade for the course. Averages for students who miss more than 3 class hours will not be rounded up (there is no difference between "excused" and "unexcused" absences relative to this policy). Two times late or leaving early count as one absence. Students missing 15 class hours (10 class days) or more will have their final average reduced by 5 points (half letter grade). Attendance is usually taken using a roll sheet. It is the student's responsibility to see that he or she signs the roll sheet each class meeting.

9. Cell Phones: In order to avoid distracting fellow students, please turn all cell phones off before the start of class. If you are expecting a possible emergency call (e.g. you have a sick child at home), please set your phone on vibrate and sit near the door. Please leave the classroom before answering the phone.

10. 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/departments 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.*

11. 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:

3 Regular Exams (100 points each)	300 points
Group Case	
Work Breakdown Structure & Gantt	10 points
Final Report	60 points
Individual Case Journal	10 points
Comprehensive Final Exam	100 points
Homework Presentation	10 points
Quiz and Class Participation	10 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."

TENTATIVE SCHEDULE OF TOPICS

Reading Assignment

We will cover the chapters in the following order. Read ahead based on what was covered in the previous class and what is scheduled in the weekly agendas on the course web site.

Productivity; Global OM; Project Management; Forecasting, Design; Decision Theory
Ch 1, Ch 2, Module A, Module B, Ch3, Ch4, Ch 5

Examination I

Quality; SPC; Process Strategy; Capacity Planning; Location; Layout; Job Design; Work
Measurement

Ch 6, Ch 6S, Ch 7, Ch 7S, Ch 8, Module C, Ch 9, Ch 10, Ch 10S

Examination II

Supply Chain Management; Inventory Management, Aggregate Planning, MRP & ERP;
Scheduling; JIT; Maintenance and Reliability

Ch 11, Ch 12, Ch 13, Ch 14, Ch 15, Ch 16, Ch 17

Examination III (Tentative: 5/8/08)

Final Examination

Comprehensive and open book—not open notes. No book or calculator sharing allowed.

Important dates:

- 1/24/08 Take-home quiz due.
- 1/31/08 Deadline for forming/joining a quality circle.
- 2/21/08 Project Work Breakdown Structure and Gantt Chart due (tentative).
- 3/7/08 Last day for dropping Spring Semester courses without grade of F.
- 3/10-14 No class—Spring Break
- 4/24/08 Case report due date (tentative)

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Final Examination Study Guide

The Comprehensive Final Exam will cover everything we have covered this semester. The emphasis here will be on whether you know how and when to apply what you have learned.

Sample Questions:

Your customer wants information from you about the state of control of the process you used to produce the most recent batch of product she purchased from your company. The tool you would use to address this request would be:

- | | | | |
|----|-----------------|----|--------------------|
| a. | C_p | d. | Breakeven analysis |
| b. | Pareto analysis | e. | Scatter diagram |
| c. | Control chart | | |

The correct answer is c.

Marketing has provided information about their estimates for future demand for your product. They are trying to decide whether to expand or not. They estimate a 60% probability of high demand and a 40% probability of low demand and provide you with the payoffs associated with each. The appropriate approach to use to evaluate your decision alternatives would be:

- | | | | |
|----|--------------------|----|----------------|
| a. | Breakeven analysis | d. | Equally likely |
| b. | Maxi-max | e. | Decision tree |
| c. | Maxi-min | | |

The correct answer is e.

Since the Final Exam is open book (**NOT open notes**) I will **NOT** provide formula sheets. **Remember, no book or calculator sharing is allowed.** While separate notes are not allowed, anything written in your copy of the text is permissible.

If your Final Examination grade is higher than your grade on Exam I, II, or III, I will replace your lowest grade with the Final Examination grade.

Bring the usual materials including a Scantron 882-E and #2 pencils.

HINT: Students in past semesters have found it helpful to place a few (10-20) Post It™ notes in their texts to index key pages. Too many Post Its™ defeats the purpose.

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Take-Home Quiz 1

NAME: _____ e-mail address: _____

Do you want an e-mail link on the class home page: YES NO

Circle the correct answer on this sheet. Quizzes are due on 1/24/08.

1. If I forget to return the homework presentation packet my presentation grade will be
 - a) reduced to 0.
 - b) reduced to 0 until the packet is returned, then reduced by 20%.

2. If I do not find a quality circle group to join, I may turn in an individual report for the case study.
 - a) TRUE
 - b) FALSE

3. The journal is a personal journal that should be completed by me and not the group and turned in separate from the case study report.
 - a) TRUE
 - b) FALSE

4. A student earns a final average of 89.5. He has missed 4 class days. His final grade is
 - a) A
 - b) B

5. A student earns a final average of 89.2. She has missed only 1 class. Her final grade is
 - a) A
 - b) B

6. A student earns a final average of 74.0. He has missed 11 class days. His final grade is
 - a) C
 - b) D

7. Whose responsibility is it for students to sign the roll sheet each class day?
 - a) The professor's
 - b) The individual student's
 - c) Class mates'
 - d) What roll sheet?

8. If I miss two of the regular examinations
 - a) the final examination grade will replace one 0.
 - b) the final examination grade will replace both 0s.
 - c) I fail the class.

9. Cell phones must be turned off or set to vibrate if an *emergency* call is expected.
 - a) TRUE
 - b) FALSE

10. The last line in my quality circle individual journal must be:
 - a) Thank goodness it is done.
 - b) My contribution to this case was...
 - c) The names of the QC group members.
 - d) The End!
 - e) My name.