

Production and Operations Management --- MGT 502
Spring 2009

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Office Hours:	None	Interact via internet
Home Pages	http://salsa.nmsu.edu	
Text (required):	Russell, Roberta S. and Taylor III, Bernard W. <u>Operations Management</u> . 6th ed., Hoboken, NJ: John Wiley & Sons, Inc. 2009 http://www.nmsubookstore.com/nmsu/ (or http://www.amazon.com)	
Capabilities:	E-mail account, spreadsheet --Excel capable, Internet access to WebCT access and Internet Exercises.	
Course Description	Systems and specialized models applied to the management of production facilities and service operations, including physical and human resources. Prerequisite: graduate students only	
Objectives and Outcomes	Upon successful completion of this course you should : <ol style="list-style-type: none"> 1. Be able to identify the basic issues associated with the transformation processes associated with the production of goods or services, 2. Be able to apply basic analysis tools available to the operations manager in planning, designing, and continuously improving the value adding system, 3. Be able to recognize the relevance of operations management in a variety of career positions, most importantly in the career directions of your choice. 	
Methodology	Homework using Microsoft Office: WORD, Excel and Powerpoint, on-line progress quizzes and exams, Web-CT Slides and Internet resources.	
Evaluation and Grading		
4 Exams (drop lowest)	60%	A 90 to 100%
Integrative cumulative application project ¹	15%	B 80 to 89 %
Quizzes, Homework, Drop-box assignments (dropping the lowest)	25%	C 70 to 79% D 60 to 69% F Less than 60%

¹ The College of Business has requested that this course be one of several that perform “outcomes assessment” in the quantitative analysis area. This serves both the student and the university in pursuit of continuous improvement. There are no templates for doing this, so this assignment is my effort to provide a meaningful learning experience for the student while meeting the request of the college’s Graduate Committee.

General University Policies

STUDENTS WITH DISABILITIES: If you have (or believe you have) a disability & would benefit from classroom accommodation(s), contact the Services for Students with Disabilities (SSD) at Corbett Center, Room 244 (Phone 646-6840; TTY 646-1918). All medical info is treated confidentially. Do not wait until you receive a failing grade. Retroactive accommodations cannot be considered. Information, instructions & forms from the Services for Students with Disabilities Office are online at <http://www.nmsu.edu/~ssd/index.html>. **Accommodations:** SSD Office, 646-6840 (Corbett Center, room 244); **Discrimination:** Office for Institutional Equity, 646-3635, O'Loughlin House.

Student Responsibilities

1. Within a few days of the start of the semester, register with SSD & obtain forms.
2. Within the first 2 weeks of beginning of classes (or within 1 week of the date services are to commence), deliver the completed forms to the instructor(s).
3. Within 5 days of giving the forms to faculty & at least 1 week before any scheduled exam, retrieve the signed forms from faculty & return them to SSD.
4. Contact the SSD Office if services/accommodations requested are not being provided, not meeting your needs, or additional accommodations are needed.

Faculty Responsibilities

1. Within five 5 working days after student gives you the forms, sign them, retain a copy, & return originals to the student.
2. Contact SSD immediately if there are any questions or disputes regarding accommodation(s), disruptive behavior, etc.
3. Refer the student to SSD for any additional accommodations.

Last Day to Add:The last day to add this class **1/26/09**.

Withdrawal Policies: The last day to drop and receive a "W" is **3/09/09**.

Incomplete Grades: The incomplete grade "I" may only be assigned for circumstances beyond the student's control that occur AFTER the last day to withdraw from the course. Job related circumstances are generally not appropriate grounds for assigning an "I" grade. See graduate catalog for full details.

Course Schedule: We reserve the right to change classroom policies or assignments if circumstances dictate. Any changes will be announced via e-mail/HomePage and it is your responsibility to be aware of them.

MGT 502 Schedule					
January 8 through May 8, 2009					
Class	Date	Chapter Reading Topics & Study Prep for HW due next period	Assignment Dropbox: available Deadline	Quiz available Deadline	Homework Due on prior Reading & Study Bold verbs highlight things for you to do.
1	Jan 15 Th	Ch 1 Introduction to Operations Management			Purchase text, obtain e-mail account and access to WebCT. Log onto http://www.nmsubookstore.com/nmsu/ or www.wiley.com/college/russell and check out student resources.
2	Jan 20 Tu	Ch. 1: Operations Strategy : Operations Components of Competitive Strategy		1/15/09 1/27/09 11:55pm	Ch 1. Review positioning the firm, globalization, and productivity concept, and balanced score card. Complete the On-line Quiz for Chapter 1 (The quiz is essentially the End of Chap Questions 1-1,1-2, 1-7, 1-20. The purpose is to get started and make sure WebCT quiz mechanics are in place.) These are focusing questions requiring only a paragraph or in some cases a sentence or two. However 1-7 may well become a foundation for your Integrated Project theme.
3	Jan.22 Th Jan 26 is last day to add	Ch. 4: Product & Service Design -- Importance of Concurrent-Cross functional Design Teams --Once the motto was "Quality is Free" (Crosby), now we might start to view <i>Green Is Free</i> in a similar way.	1/15/09 1/27/09 11:55pm	1/15/09 1/27/09 11:55pm	Ch 4. Study Product Design, Concurrent Design, Technology in Design, Collaborative Product Design, Design Review, Design for Environment Do Quiz Ch 4 Short Essay Questions Do Integrative Project Part I. Overview of your firm

4	Jan 27 Tu	Ch. 5: Product & Service Design- Designing for reliability.	1/22/09 1/29/09 11:55pm		Ch 4. Study Quality Function Deployment, The House of Quality and Robust Design. pp 169-175. Ch 4. Use Excel to solve the end of chap. problem 4-8 on page 179. Submit your answer via the Assignment Drop box. Your filename should be [YourWebCT Login ID_Ch4_No8.xls] no spaces and use underscore_ , NOT dash-. Note: WebCT tend to give an error for dashes or blanks in file names.
5	Jan 29 Th	Ch.7 Capacity & Facilities: Process Layout and Product Layouts	1/15/09 1/29/09 11:55pm		Do Integrative Project Part II. Product & Process Ch 7. Study: Pros & Cons of Expansion Strategies and capacity cushion.
6	Feb 3 Tu	Ch.7 Facility Layout : Process Layout and Product Layouts			Ch 7. Study characteristics of Basic layouts, their objects, where each is appropriate. pp. 254-259. Study designing process and product layouts, pp 260-269.
7	Feb 5 Th	Ch.7 Facility Layout : Process Layout and Product Layouts	1/29/09 2/05/09 11:55pm		Ch.7 Solve Problems 7-10 Process Layout based on load summary) and 7-12 (Process Layout based on Relationships) Use Excel. Drop-box assignment
8	Feb 10 Tu	Ch.7 Facility Layout : Cellular Layouts and Group Technology	1/29/09 2/10/09 11:55pm		Ch 7. Solve Problem 7-16 Line Balance. Use the Longest task among candidates rule. Drop-box assignment Exam 1 released for review period
9	Feb 12 Th		2/05/09 2/12/09 11:55pm	2/12/09 2-17/09 11:55pm	Exam 1 Ch 1, 4, 5, 7 Released. Questions of clarification e-mailed by Feb 14. My response to questions by Feb 16. Submit exam by Tuesday, Feb. 19 see deadline on Drop-box. Do Integrative Project Part III. Process Layout

10	Feb 17 Tu	Ch.9 Project Management : PERT/CPM Activity on the Node approach with Excel		2/17/09 11:55pm	Exam 1 Submission Deadline Ch 9. Study chapter 9 (we will use only AON method, so AOA network format will not be tested) View Animated Power Point slides (posted on <u>WebCT</u>) on AON format and analysis alternative developed by your instructor. My format is similar, but is modified to simplify the arithmetic.
11	Feb 19 Th	Ch.9 Project Management			Work on CPM computational problems from Drop-box assignment.
12	Feb 24 Tu	Ch.9 Project Management	2/17/09 2/24/09 11:55pm		Do Ch 9 Drop Box computational problems that will be posted in advance.
13	Feb 26 Th	Ch.10 & 11 Supply Chain Management	2/19/09 2/26/09 11:55pm		Do Integrative Project Part IV. Project Management
14	Mar 3 Tu	Ch. 12 Forecasting: Role of Forecasting,	2/24/09 3/03/09 11:55pm		Do Integrative Project Part V. Supply Chain Management
15	Mar 5 Th	Ch.12 Forecasting: Introduction to Time Series Analysis using Excel	2/26/09 3/05/09 11:55pm		Ch 12 Do <u>Problems</u> 12-2 modified to include Exponential Smoothing, 12-4, 12-14 using Excel Template provided in DropBox. Submit your answers to the appropriate Drop Box
16	Mar 10 Tu	Ch. 12 Forecasting March 9 is Last Day to Drop with a "W"	3/03/09 3/10/09 11:55pm	3/10/09	Exam 2 released, Submission Deadline is next Tuesday Do Integrative Project Part VI. Forecasting
17	Mar 12 Th	Ch. 13 Inventory Management			

18	Mar 17 Tu			3/10/09 3/17/09 11:55pm	Exam 2 Ch 9, 10, 11 Submission Deadline
19	Mar 19 Th	Ch. 13 Inventory Management	3/10/09 3/19/09 11:55pm		Do Integrative Project Part VII. Inventory Management
	Mar 23-27	Spring Break			
20	Mar 31 Tu	Ch. 16 Lean Systems concepts, tools and philosophy	3/19/09 4/02/09 11:55pm		Ch. 13 Do Drop Box using Excel Problems 13 -40 (ABC), Case 13.1
21	Apr 2 Th	Ch. 16 Lean Systems		3/31/09 4/02/09 11:55pm	Ch 16. Do on-line Quiz on Lean Systems terms and concepts Release Exam 3 Due in one week
22	Apr 7 Tu	Ch. 15 Resource Planning <u>Theme:</u> Modeling and decision support system for complex product/service systems.			
23	Apr 9 Th			4/2/09 4/09/09 11:55pm	Exam 3 Ch 12, 13, 16 Submission Deadline
24	Apr 14 Tu	Ch. 2: Quality Management <u>Theme:</u> What is quality and how can we achieve it?	4/09/09 4/16/09* 11:55pm		Ch 15 Resource Planning Do MRP logic Drop Box assignment * note: due date is Thursday but so are two other assignments.
25	Apr 16 Th	Ch. 3: Quality Management	4/09/09 4/16/09 11:55pm	4/09/09 4/16/09 11:55pm	Ch 2 Do Quiz on Quality Concepts Do Integrative Project Part VIII. Resource Planning

26	Apr 21 Tu	Ch. 3: SPC <u>Theme</u> : How to monitor quality of our output.	4/14/09 4/21/09 11:55pm		Do Integrative Project Part IX. Lean Operations
27	Apr 23 Th	Ch. 3: SPC	4/16/09 4/23/09 11:55pm	4/16/09 4/23/09 11:55pm	Ch 3 Do Quiz on SPC concepts Do Integrative Project Part X. Quality & SPC
28	Apr 28 Tu	Ch. 3: SPC	4/21/09 4/30/09 11:55pm		Ch 3 Do <u>Problems</u> 3-2, 3-13 and 3-16 on Excel and submit via Drop-Box.
29	Apr 30 Th	Review for Final Exam		4/30/09 5/03/09 11:55pm	Review for final Practice Exam 4
	May 5 Tu	exam week May 4-8		5/4/09 5/07/09 11:55pm	Exam 4 Ch 15, 2, 3

revised 1/11/2009