

OM s335 OPERATIONS MANAGEMENT

Unique Number: 71880

Summer 2011

Instructor:	Qi Wu	Meeting Time:	MTWTHF 1:00 – 2:30 PM
Mailbox:	CBA 5.202	Classroom:	GSB 2.122
Office:	CBA 3.332A	Office Hour:	MTWTHF 2:30 – 4:00 PM
Email:	qi.wu@phd.mcombs.utexas.edu	Phone:	(512) 968-1689 (Cell)

COURSE DESCRIPTION:

Operations Management (OM) is the cost effective management of resources to achieve organizational goals. OM focuses on the systematic planning, design, operation, control, and improvement of the processes which produce goods and deliver services. Managing operations is vital to every type of organization, for it is only through effective and efficient utilization of resources that an organization can be successful in the long run. This is especially true today, when we see that significant competitive advantages accrue to those firms that manage their operations effectively.

This course is the “foundations course” for our new major in Supply Chain Management. This class can also be useful to students with other majors because every business has an operations component.

Prerequisites: credit or registration for BA 324 (or credit for MIS 324) and credit or registration for STA 309.

COURSE OBJECTIVES:

The main objectives of this course are:

- To provide you with an understanding of the crucial importance of operations management in today’s business environment.
- To familiarize you with the basic concepts, techniques, methods and applications of operations management.
- To enhance your analytical skills and ability to uncover problems and opportunities for improvement in production and service processes.

COURSE MATERIALS:

Course Overview:

Operations management (OM) involves the integration of numerous activities and processes to produce products and provide services in a highly competitive global environment. Most organizations recognize that world class performance in operations is essential for competitive success and long-term survival. We will consider key performance measures of operations (productivity, flexibility, quality, and response time) as well as important concepts for improving the performance of operations along these dimensions. This course takes a lectures plus cases format. Lectures would give you the necessary concepts and tools to identify and analyze operations problems. Cases would give you means

to apply what you have learned from the course to “real-world” operations problems and to see how these tools and skills can be applied to improve operations performance for organizations.

COURSE MATERIALS:

1. Required Readings

- Book: “The Goal” by Goldratt and Cox, 3rd Revised Edition. Great Barrington, MA: North River Press, Inc. 2004. ISBN: 978-0884271789 ¹
- Course Packet: Available at the GSB Copy Center. It contains a set of cases we will discuss in class.

2. Recommended Readings

Book: “Operations & Supply Management” by F. Robert Jacobs, Richard B. Chase and Nicholas J. Aquilano, 13th edition, McGraw Hill.

3. **Course Website:** This course will use Blackboard substantially. The login page is located at <http://courses.utexas.edu>. A UT EID is required for accessing the web site. If you need more information or tutorials, go to <http://www.utexas.edu/cc/blackboard>. If you have problems using blackboard, you can call the ITS help desk at 475-9400. You will find the following on Blackboard:

(a) **Course Notes:** In the morning of each class day, the slides will be posted under “Course Documents”. Hard copies will be distributed before each class. These slides will often be incomplete and you will be expected to fill in the blanks in class. Partially completed slides will be posted on Blackboard by the end of each class day.

(b) **Assignments and Solutions:** Homework assignments will be posted under “Assignments” at least 2 days before their due date. Solutions will be posted by the end of the lecture on the day a homework assignment is due.

(c) **Practice exams:** Before every test, a practice exam will be posted. It will have the same number of questions and level of difficulty as the actual test. It will be posted under “Course Documents”.

(d) **Forums:** You are invited to post any comments you have about the material and ask questions on the “Discussion Board”. You can also post comments, criticisms and suggestions anonymously regarding the course.

(e) **Grades:** Grades on exams and assignments will be posted on Blackboard. Please check that the posted grade matches the grade on your paper copy and, in case of a discrepancy, notify the instructor (for exams) or the TAs (for assignments) as soon as possible.

PERFORMANCE EVALUATION:

Your grade will be assessed through homework assignments, exams and class participation. Below is a description of how the various types of assignments and tests contribute to your grade, as well as a description of each type of graded work.

Your grade will be based on the following distribution:

¹ This is the latest edition. You may use the second edition or higher.

Midterm Exam I:	15%
Midterm Exam II:	15%
Final Exam:	35%
Individual Homework:	18%
Group Assignment:	7%
Class Participation:	10%
Total:	100%

The requirements and a description for each item are outlined below.

1. **Exams:** The first Midterm Exam (**25th July**) will cover the material through Sessions 1-10 and the second Midterm Exam (**8th August**) will cover the material through Sessions 12-20. The final exam would be comprehensive. The exams may contain true/false, multiple choice, short answer, or analytical problem solving questions. The exams are closed book and closed note. You are allowed to bring one page of cheat sheet (formula, etc, anything you deem important). Do remember to bring your calculator. No Laptop allowed. Other necessary tables used throughout the semester will be provided during the exam.
2. **Make-up Exams:** Offering a make-up exam for a missed exam is entirely at the discretion of the instructor. Students with legitimate reasons and **letters of proof** could request to take make-up exams.
3. **Individual Homework:** There will be ten individual assignments throughout the semester. You are required to complete them individually. Homework should be turned in, properly stapled if two or more pages, at the beginning of the class session on the due date.
 - a. NO LATE HOMEWORK SUBMISSION WILL BE ACCEPTED because the solution would be posted right after the class on the due date.
 - b. Each performance based question will be graded on a 10-point scale. You have the opportunity to drop the lowest grade if you submit ALL 10 homework assignments.
4. **Group Assignment:** There will be one case study and the discussion of “The Goal” which will be completed in self-formed groups of **three** students. The cases are meant to give you a taste for some “real-world” operational problems. A question set will be provided for each of the case. Each group only needs to submit one report and will receive one single grade. In your report, address all the questions posted for the case. All reports need to be typed using 12-point font and 1.5 line space. The only exception to the typing rule is when you want to include diagrams or drawings. Hand drawing is acceptable in your report. NO LATE CASE REPORTS WILL BE ACCEPTED because we will discuss the case in class on the day when it is due.
 - a. Please form your groups before the start of the 3rd day’s class and submit the list of your group members along with your first individual homework.
 - b. “The Goal”: This internationally recognized best seller is a classic piece which captures many of the concepts and issues regarding firm’s operations addressed in

the course. It is a fun summer reading and does not require any prior knowledge or mathematical skills. Start to read it now! Do not wait until the day the summary is due.

- c. At the end of the semester, you will be asked to evaluate every team member of your group. And the peer-evaluation results will be incorporated into the final grades. You need to report to me any serious issues you have with your team members as early as possible. Do remember that one of the most valuable skills you can develop over your college years is to learn how to be a good team player and resolve team conflicts effectively.

5. **Mandatory Class:** The Beer Game

On the day of “Beer Game”, we need to **extend our regular class time by half an hour**, i.e., we need to meet **from 1:00pm to 3:00pm on August 11th**. “Beer Game” is an incredibly popular, entertaining and educational activity; its purpose is to introduce students to one of most crucial issues in Supply Chain Management. Please contact me **immediately** if there is a scheduling conflict. The attendance to the Beer Game counts for 2% of your final grade.

Scholastic Dishonesty:

I take honesty and integrity very seriously. I will follow up on issues according to university rules. For more information, you can refer to the website at <http://deanofstudents.utexas.edu/sjs/>. Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and/or dismissal from the university. Since dishonesty harms the individual, all students, and the integrity of the University, policies on scholastic dishonesty will be strictly enforced.

Students with Disabilities:

The University of Texas at Austin provides upon request appropriate academic accommodations for qualified students with disabilities. For more information, contact the Office of the Dean of Students at 471-6259, 471-4641 TTY.

If for some reason you need special assistance to take an exam or complete an assignment please notify me ahead of time so that arrangements can be made in a timely fashion.

The following is a tentative schedule of meetings, readings, and deliverables for the semester. This is subject to change. When there are major changes, you will be notified by email; a current schedule will always be available on the blackboard course website.

	Date	Topic	HW Due Date
1	7/11 M	Introduction to Operations Management: Operations & Supply Strategy	
2	7/12 T	Process Analysis: Process capacity and bottleneck analysis	
3	7/13 W	Process Analysis: Kristen's Cookie Co. Case	HW1 with group member list and course contract
4	7/14 Th	Flow Analysis: Kristen's Cookie Co. Case	
5	7/15 F	Process Design: Line Balancing	HW2
6	7/18 M	Benihana Case	HW3
7	7/19 T	Process Design: Setup times and Batching	
8	7/20 W	Project Management: Introduction	HW4
9	7/21 Th	Project Management: Crashing	
10	7/22 F	Review	HW5
11	7/25 M	Exam I	Group HW1
12	7/26 T	Queueing Theory: Introduction	
13	7/27 W	Queueing Theory: Managing queueing systems	
14	7/28 Th	Queueing Theory: Throughput losses	HW6
15	7/29 F	Quality Management: Statistical Process Control	
16	8/1 M	Quality Management	HW7
17	8/2 T	EOQ Model	
18	8/3 W	Inventory Management: Newsvendor Model	HW8
19	8/4 Th	Inventory Management: Newsvendor Performance Measures	
20	8/5 F	Review	HW9
21	8/8 M	Exam II	
22	8/9 T	The Goal	Group HW2: The Goal
23	8/10 W	Supply Chain Management: Beer Game This session will be held from 1:00pm-3:00 pm.	
24	8/11 Th	Supply Chain Management: Bullwhip Effect	HW10
25	8/12 F	Review	
	TBA	Final Exam	

OM 335: Course contract

Please **initial** every rule then sign and date.

I have read and understood the syllabus for OM335 (unique number 71880). Specifically, I am aware of the following rules:

- I can only discuss my grade on a homework assignment with the instructor up to a period of **one week** after the graded assignments have been returned in class.
- I can only discuss my grade on a midterm exam with the instructor up to a period of **one week** after the graded exams have been returned in class. Before I do so, I need to take a look at the “grading scheme” file.
- On a day when a homework assignment is due, I have to hand it in within **5 minutes** of the starting time of the lecture. If I choose to email my homework. I have to send it to the instructor before the start of the lecture.
- I understand that no late homework assignment will be accepted.
- I understand that attendance to the beer game is required and worth 2% of my final grade.
- I have to let the instructor know well in advance if I cannot come to the beer game.
- I understand that extra credit work will not be given under any circumstance.
- I should pick up my name card at the start of each lecture. If I participated during the class session, I should put it back on the instructor’s desk at the end of the class (honor system).
- I have to return this form back to the instructor signed and initialed by the start of the 3rd lecture with homework 1 (for one point).

Date and Signature