
OM 368: LOGISTICS AND INVENTORY MANAGEMENT (Spring 2010)

(last update on January 19, 2010)

#03920 : M-W 3:30-5pm in UTC 3.112

Instructor : Dorothee Honhon Email : dorothee.honhon@mcombs.utexas.edu
Office : CBA 3.440 Phone : 512-471-4130
Mailbox : CBA 5.202
Office Hours : M-W 5-6pm Web : <http://courses.utexas.edu>

TA[†] : Liwen Chen Email : liwen.chen@phd.mcombs.utexas.edu
Office : CBA 1.306A Phone : 512-589-7821 (cell phone)
Mailbox : CBA 5.202
Office hours : By email[†]

*I am also available by appointment on Mondays and Wednesdays before 2pm. I will never be available for appointments on Tuesdays and Thursdays.

†There will be extra office hours during the week before the midterm and final exams.

COURSE DESCRIPTION:

This course is a follow up to the Operations Management course (OM 335). It delves deeper into the concepts of logistics and inventory management, specifically, forecasting, transportation, facility location and assortment planning. Using case studies and an online game, the students will learn to apply the concepts listed above to real-life problems.

The main objectives of this course are:

- To provide you with an understanding of the role and importance of logistics and inventory management in today's successful product and service companies.
- To familiarize you with the basic concepts, techniques, methods and applications of logistics and inventory management strategic planning.
- To enhance your analytical skills and ability to solve real-life logistics and inventory management problems.

Prerequisites: OM335 or OM335H.

COURSE MATERIALS:

1. Required Readings

- Course Packet: Available at the GSB Copy Center. It contains a set of cases we will discuss in class as well as a code to participate in the supply chain game.

2. Suggested Reading

- Book: “Business Logistics/Supply chain Management” by Ronald H. Ballou, 5th Edition. Pearson Prentice Hall 2004.
ISBN: 0-13-066184-8

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: Before each lecture, a pdf version of the slides will be posted under “Course Documents”. Most of the time, these slides will 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 lecture.

(b) Assignments: Questions and solutions to individual homework assignments will be posted in the “Assignments” section.

(c) Forums: You are invited to further discuss topics brought up in class on the forum. You can also post any comments your have about the material and ask questions. Finally, you can post comments, criticisms and suggestions anonymously regarding the course.

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

Remark: Password-protected class sites will be available for all accredited courses taught at The University. Syllabi, handouts, assignments and other resources are types of information that may be available within these sites. Site activities could include exchanging e-mail, engaging in class discussions and chats, and exchanging files. In addition, class e-mail rosters will be a component of the sites. Students who do not want their names included in these electronic class rosters must restrict their directory information in the Office of the Registrar, Main Building, Room 1. For information on restricting directory information see:

<http://www.utexas.edu/student/registrar/catalogs/gi02-03/app/appc09.html>.

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.

	Grade
Midterm exam	20%
Final exam	20%
Team homework assignments	20%
Individual homework assignments	30%
Blackboard quizzes	5%
Class Participation	5%
Total	100%

Extra credit work will not be given under any circumstance.

Exams

The midterm exam will cover the materials from sessions 2-12. It will be in class and will be closed book and closed notes. Remember to bring your calculator. A formula sheet will be provided during the exam (a copy of the sheet will be put on Blackboard before the exam). The questions on the midterm exam will be similar in terms of difficulty to the questions on the individual homework assignments.

The final exam will be comprehensive but with a greater focus on the materials from sessions 16-28. It will be a take home exam so you will be free to use all the material from the course or anything else you'd like. It is an individual exam therefore you are not allowed to talk to any of your classmates or consult anyone else but the instructor and the TA. The questions on the final exam will be slightly more difficult than the questions on the individual homework assignments. You will have a week to do the final exam.

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 can request to take make-up exams.

A "grading scheme" file, which explains how the graded was calculated, will be made available after the grade exams are returned. Students must read this file before coming to the instructor to discuss their grade. Any concern regarding the grading of exams should be addressed directly to the instructor, no later than two weeks after the graded exam was returned in class.

Homework Assignments

Homework assignments have to be submitted, preferably by email as one pdf file to the TA and the instructor within 5 minutes of the starting time of the class session class (please make sure the file is readable and under 2MB), or in class at the beginning of the class session listed on the schedule. They can also be put in the instructor's mailbox or under the instructor's office door but then you need to send an email to the instructor immediately to let her know that you have done so. No late homework assignments will be accepted.

Homework assignments will be graded by the TAs on a scale of 0 to 10. Points will be given for correctness of your answers and presentation. Any concern regarding the grading of homework assignments should be addressed directly to the TAs and not to the instructor, no later than two weeks after the graded assignment was returned in class.

Team homework assignments

There are 4 team homework assignments throughout the semester (each worth 5%). They are all based on the "Supply Chain Game" described below. You will be in teams of 3 or 4 students. A peer review system will be used at the end of the semester to reward the students who actively participated in the game with bonus points.

Individual homework assignments

There are 2 individual homework assignments (each is worth 15%) throughout the semester. They contain problem-solving type questions that are similar to the questions on the exams. Students are not allowed to talk to anyone but the instructor and the TA about the individual homework assignments. The solutions to these assignments will be provided at the end of the day when they are due.

Blackboard quizzes

There are 10 quizzes to be done on Blackboard. These quizzes contain multiple choice questions which are a straightforward application of the material seen in class and are to be done individually after going through the slides for each lecture. The lowest two scores on these quizzes will be dropped. The other 8 quizzes will be worth 5% of your final grade (each worth 5/8%). The first quiz is about the syllabus. The quizzes are due by 11pm on the day they are due.

Class Participation

Regular attendance at all class meetings is expected.

Students are expected to prepare before class when the lecture is a case discussion. Participation in class, in the form of answering questions and/or commenting on the material is strongly encouraged. Participation on the Blackboard forum will also be counted towards the class participation grade, as long as the posted comments are relevant.

In each session, students are asked to pick up their name card and return it at the end of the session. Students who participated in class are asked to put their name card back on the instructor's desk, the others are asked to put it on the first row of student desks.

Students may not disturb classmates or use their cell phones in class.

The “Supply Chain Game”

The “Supply Chain Game” is a web-based, discrete event simulator that illustrates many of the concepts we will discuss in class. It was developed by two Operations Management professors at Northwestern and the University of Chicago. We will play two rounds of the game, each round lasting for one week. You will be playing in teams of 3 to 4 students.

The “Crash Course in Excel”

Knowing how to use Excel is a very valuable tool. The lecture on March 3rd will cover some useful methods and functions in Excel which may be useful for doing the homework assignments. This lecture is entirely optional.

SCHOLASTIC DISHONESTY

The McCombs School of Business has no tolerance for acts of scholastic dishonesty. The responsibilities of both students and faculty with regard to scholastic dishonesty are described in detail in the Policy Statement on Scholastic Dishonesty for the McCombs School of Business:

By teaching this course, I have agreed to observe all of the faculty responsibilities described in that document. By enrolling in this class, you have agreed to observe all of the student responsibilities described in that document. If the application of that Policy Statement to this class and its assignments is unclear in any way, it is your responsibility to ask me for clarification. Policy on Scholastic Dishonesty: Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course an/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. You should refer to the Student Judicial Services website at <http://deanofstudents.utexas.edu/sjs/> or the General Information Catalog to access the official University policies and procedures on scholastic dishonesty as well as further elaboration on what constitutes scholastic dishonesty.

STUDENTS WITH SPECIAL NEEDS

The University of Texas at Austin provides upon request appropriate accommodations for qualified students with disabilities. For more information contact the Office of the Dean of Students at 471-6259 or 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 special arrangements can be made in a timely fashion.

SCHEDULE

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	Case	Hws*
1	Jan 20 W	Course presentation		
2	Jan 25 M	Forecasting: forecast error and moving averages		
3	Jan 27 W	Forecasting: exponential smoothing		BQ1
4	Feb 1 M	Forecasting: classic time series decomposition		BQ2
5	Feb 3 W	Forecasting: case study	Wilkins	
6	Feb 8 M	Supply chain game: presentation & IM: Basics		BQ3
7	Feb 10 W	IM: basic EOQ model		
8	Feb 15 M	IM: EOQ model with non-instantaneous resupply		BQ4
9	Feb 17 W	IM: EOQ model with backorders		THW1
10	Feb 22 M	IM: EOQ model with quantity discounts		
11	Feb 24 W	IM: case study	Blanchard	BQ5
12	Mar 1 M	Supply chain game: Debrief of Scenario 1		THW2
13	Mar 3 W**	Crash course in Excel		
14	Mar 8 M	Review session		IHW1
15	Mar 10 W	Midterm		
	Mar 15 M	[Spring Break]		
	Mar 20 W			
16	Mar 22 M	IM: Newsvendor model		
17	Mar 24 W	IM: case study	LL Bean	
18	Mar 29 M	IM: Periodic review (part I)		BQ6
19	Mar 31 W	IM: Periodic review (part II)		
20	Apr 5 M	IM: Periodic review (part III)		
21	Apr 7 W	Transportation		BQ7
22	Apr 12 M	Transportation: case	Frito-Lay	
23	Apr 14 W	Facility Location Strategy		THW3
	Apr 19 M	Facility Location Strategy		BQ8
24	Apr 21 W	Facility Location Strategy	Amazon	THW4
25	Apr 26 M	Supply chain game: Debrief of Scenario 2		BQ9
26	Apr 28 W	Assortment Planning; Make-to-order		
27	May 3 M	Assortment Planning; Make-to-stock		BQ10
28	May 5 W	Review session		IHW2
29	TBA	Final exam		

*IHW = individual homework assignment, THW= team homework assignment, BQ = Blackboard quiz

** optional session.