

SCM 6A01: Production and Operations Management

Fall 2017

C. T. Bauer College of Business, University of Houston
Department of Decision and Information Sciences

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Class Time: SCM6A01-04(19059): 6:00-9:00 pm, Tuesday, MH 128

Office Hours: 4:15-5:30 pm, Tuesday & Thursday or by appointment

Course Description

This course introduces the student to the concepts, issues and techniques used to plan, analyze and control operations for both production and service processes. The course addresses strategic and operational issues at both the enterprise and supply chain levels.

Course Prerequisites

Prerequisite: Admission to the C.T. Bauer MBA program.

Course Objectives

1. To develop an understanding of operation and supply chain systems: inputs, conversion processes, and outputs for both manufacturing and service environments.
2. To develop an understanding of the relationships among operations and supply chain, marketing, accounting, finance and engineering functions.
3. To develop student's ability to formulate and analyze operations and supply chain problems.
4. To develop a basic understanding of the nature of operations and supply chain managers' jobs.

Course Materials

Textbook

Operations and Supply Chain Management: The Core, 4th edition, by F. Robert Jacobs and Richard B. Chase, McGraw-Hill Irwin, 2013. ISBN 978-1-259-54972-4.

Case studies: There is a course page created on Harvard Business Online for you, where you can access the cases required for the course. The link is listed below:

<http://cb.hbsp.harvard.edu/cbmp/access/66261091>

You will have to register with Harvard Business Online to get access to the cases the easiest and the least expensive way.

Structure of the Course

This course meets once a week. Hence, every session is important. In class activities will be designed to explain the material covered by the cases and readings. However, in class activities only enhance the materials found in the texts, not replace them. You must read the assigned course material!

Homework problems, quizzes, case studies and examinations provide an opportunity to apply the concepts developed in course and demonstrate knowledge of the material.

Performance Evaluation

A 100 point grade scale is used for this course. Grades will be made up of the following items:

Mid-term Examination: In-class examination which measures the mastery of the course material. The exam will be closed book and closed notes. The instructor will provide all mathematical formulas and statistical tables. The exam will cover all material from lectures, readings, videos, exercises, study problems, etc. The exam format will be a combination of multiple choice, short answer questions and problems. Each student will be allowed to use a regular calculator during the exam. Cell phones cannot be used instead of calculators.

Final Examination: In-class examination which measures the mastery of the course material. The exam will be closed book and closed notes. The instructor will provide all mathematical formulas and statistical tables. The exam format will be a combination of multiple choice, short answer questions and problems. Each student will be allowed to use a regular calculator during the exam. Cell phones cannot be used instead of calculators.

Quizzes/Homework Assignments: There will be announced/unannounced quizzes and/or homework during the semester. Each will entail knowledge of materials already assigned or discussed in class. The student should be prepared for a quiz over the assigned material each day. Preparing notes on discussion questions, working assigned problems and reviewing material from previous class will enhance performance on the quizzes. Homework assignments should be turned in on time according to the instructions. No late assignments will be accepted. Homework assignment should be one's individual work and not be shared with anyone. At the end of the semester, the lowest quiz/homework grade will be dropped. If a student misses a quiz/homework (e.g. for illness, job related reasons, job interview or any other circumstances), that quiz/homework will count as the lowest grade and will be dropped at the end of the semester.

In Class Performance: I view each class meeting as a business meeting. During this time the course material and topic will be discussed. Each student is expected to actively participate during class meetings. Your contributions toward advancing the class' understanding of the course material provide the basis for your in-class performance grade. The quality of one's contributions versus the quantity of contributions weighs more heavily in demonstrating a high level of in class participation. Insightful analysis of the day's topics is a plus. Class attendance alone does not indicate in-class performance —you must make a contribution to class learning.

Grade Calculation:	<u>Percentage</u>
Mid-term Examination	30%
Final Examination	30%
Quizzes/Homework Assignments	25%
In-class performance	<u>15%</u>
Total	100%

In determining the final course grade, the following scale is used to convert points into letter grades:

A =	93 - 100 %	C+ =	78 - 79 %
A- =	90 - 92 %	C =	70 - 77 %
B+ =	88 - 89 %	D =	60 - 69%
B =	80 - 87 %	F =	0 - 59%

Make-up Exam Policy

The syllabus contains the dates of the examinations so that you can schedule your other activities around these dates. If a major exam is to be missed due to an approved university absence, you should inform the instructor as soon as possible prior to the exam (if not possible, no later than 24 hours after the exam). A make-up exam will then be scheduled as soon as possible. The make-up exam will cover all the material presented up to the date of the make-up exam. The format of the exam may be different than the original exam format.

General Policies

As students enrolled in courses offered by the Bauer College, you are expected to adhere to the ethical principles described in the Bauer Code of Ethics and Professional Conduct (Bauer Code), in addition to those required by the UH Student Handbook. You may review the Bauer Code by clicking on the following link - <http://www.bauer.uh.edu/BCBE/BauerCode.htm>. You may obtain a copy of the UH Student Handbook from the Dean of Students Office located in room 252 of the University Center, or by visiting the publications webpage on the Dean of Student's website at <http://www.uh.edu/dos/pub.html>.

1. **Timely Arrivals and Departures:** It is expected that you arrive on time and prepare to leave after class has been dismissed.
2. **Office Hours:** I will have regularly scheduled office hours. If for some reason you need to meet at an alternate time, please contact me so we can make arrangements to meet. You are encouraged to contact the professor at the first sign of any problem or lack of understanding. Do not wait until it is too late!
3. **Technology in class:** It is expected that you provide full attention during class. Please turn your cell phones off before coming to class. Also, please note that computer use and Internet network access is not granted during class. If the instructor decides to grant access at any point throughout the semester, it is not for the purpose of 'surfing the Web', 'checking e-mails' or instant messaging during class times is not allowed as this behavior is unprofessional, and fails to meet the standards of the business program. The sole purpose of allowing Internet access (if allowed) during class times (when necessary) is to enhance the overall learning environment by providing electronic access to relevant class related material.
4. **Study Groups:** I strongly encourage students to form study groups for the course. This will provide a resource for information should you miss class, a venue for discussing assignments, and a study group for exams.
5. **Blackboard:** Course materials, announcements, grades or changes to the course outline will be posted on Blackboard Learn. It is the student's responsibility to check Blackboard before every class period for important announcements, class notes, emails, grades and changes to the course schedule.
6. **Academic Dishonesty:** Scholastic Dishonesty is defined as (1) Acquiring or attempting to acquire information from others (e.g., observing the work of others during an exam), (2) Providing others with information on quizzes/exams; (3) Plagiarism, (4) Conspiracy to commit any of the above, (5) Fabrication of information. The University of Houston honor code statement applies to all students in this class. For more information, see Bauer Academic Honesty on <http://www.bauer.uh.edu/current/academic-honesty.asp>. Any student caught providing or receiving assistance on an exam/quiz/homework assignment will immediately be given a grade of "F" for the course.
7. **Students with Disabilities:** Any student who feels s/he may need an accommodation based on the impact of a disability should contact the professor privately within the first two weeks of classes to discuss his/her specific needs. The student also needs to contact the Center for Students with

Disabilities (contact information is below) within the first two weeks for coordinating accommodations.

Justin Dart Center for Students with Disabilities
CSD Building #568, Room #110, University of Houston, Houston, Texas 77204-3022
Phone: (713) 743-5400; TDD: (713) 749-1527

8. **Counseling and Psychological Services (CAPS):** CAPS can help students who are having difficulties managing stress, adjusting to college, or feeling sad and hopeless. You can reach CAPS (www.uh.edu/caps) by calling 713-743-5454 during and after business hours for routine appointments or if you or someone you know is in crisis. Also, there is no appointment necessary for the “Let's Talk” program, which is a drop-in consultation service at convenient locations and hours around campus. http://www.uh.edu/caps/outreach/lets_talk.html.

HAVE A GREAT SEMESTER!

Course Schedule

MODULE 1: OPERATIONS AND SUPPLY CHAIN STRATEGY

Aug 22 Course Overview

Read: Chapter 1: Operations and Supply Chain Management

Homework Assignment: Due August 29. Complete the Analytics Exercise: *Comparing Companies Using Wall Street Efficiency Measures* on page 23. The Prepare a two page summary of your findings.

The format is:

- List the companies and industry.
- Prepare a table with the comparative statistics of the companies
- Insights and Conclusions

In preparing your summary, you can use the following sites in addition to the individual company websites.

<http://www.msn.com/en-us/money/>

<http://www.aol.com/finance/>

Operations and Supply Chain Strategy

Read: Operations and Supply Chain Strategy Lecture notes

Chapter 2: Strategy and Sustainability

Discussion Question:

1. How do operations and supply chain strategy relate to marketing and finance?
2. What are the major competitive dimensions of operations strategy?
3. How do order winners and qualifiers relate to operations strategy?
4. What role does strategic fit play in evaluating a firm's operations strategy?

Case: "IKEA" (posted on Blackboard), be prepared to discuss the questions at the end of the case.

Aug 29 Supply Chain Strategy and Operational Processes

Read: Chapter 6, pages 168-180.

Case: "The Tao of Timbuk2: on pages 42-43. Be prepared to discuss the questions at the end of the case.

Videos: <http://www.timbuk2.com/content/about-manufacturing.html>

<https://www.youtube.com/watch?v=tYyQpSI7TtQ>

Case: "Rapid Fire Fulfillment, Ferdows, Kasra; Lewis, Michael A.; Machuca, Jose A.D. *Harvard Business Review*. Nov2004, Vol. 82 Issue 11, pages 104-110.

1. Explain the key elements of Zara's demand and supply integration strategy? How do they manage the customer decoupling order point to provide wide product variety within a short lead-time?
2. Amazon is becoming a dominant retailing force, as witnessed by their increase in market share. One can argue that Zara is relatively Amazon-proof. What might be the reasons for such a statement?

Supply Chain Strategy and Operational Processes: Service Systems

Case: "Benihana of Tokyo", HBS#9-673-057

1. Examine the service system of Benihana of Tokyo. What are the flows? Where are the inventories held?
2. What are the key ingredients in Benihana's successful recipe? Compare Benihana's operating ratios with those of a typical restaurant.
3. What is the relationship between Benihana's marketing and operations strategies?

MODULE 2: PROJECT MANAGEMENT

Sept 5 Project Management: Overview and Critical Path Method

Read: Chapter 5, Project Management
Project Management- Class Lecture notes

Project Management: Risk Management in Projects

Read: Normal Curve: posted on blackboard

MODULE 3: DEMAND & SUPPLY INTEGRATION

Business Forecasting

Read: Chapter 3, Forecasting pages 44-57, 67-70.
Forecasting Class Lecture notes

Sept 12 Business Forecasting (continued)

Read: Chapter 3, pages 73-77.

Sept 19 Examination 1

Format: Mix of multiple choice, short answer, and problems. Bring a calculator to exam (cell phones cannot be used for calculators). Equations will be provided. Exam covers all material covered up to the day of the exam.

Inventory Management: Basic Concepts and Order Point Systems

Read: Chapter 11, pages 352-359, 363-371, 374-381
Inventory Lecture Notes

Sept 26 Inventory Management (continued)

Oct 3 Location, Logistics and Distribution

Read: Chapter 14, Location, Logistics and Distribution

Case: AmazonFresh: Rekindling the Online Grocery Market, HBS#9-615-013

Oct 10 Examination 2

Covers all course material since Examination 1. Format: Mix of multiple choice, short answer, and problems. Bring a calculator to exam (cell phones cannot be used for calculators). Equations will be provided.