

# Production and Operations Management

## SCM 6A01 Section 19286 – Spring 2016

**Professor:** Gordon D. Smith, Ph.D.  
**Class Schedule:** 6:00 to 8:50 PM Tuesday Room: Melcher Hall 118  
**Student Hours:** MH 260A Tuesday 5:00PM – 6:00PM and by appointment.  
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### I. Course Description

Operations Management (OM) is the study of how organizations employ their resources to produce goods and services to satisfy customer demands. This business process is known as the supply chain, and the planning and control of this process is called Supply Chain Management (SCM). SCM brings together the areas of Marketing, Engineering, Accounting, Finance, MIS, Statistics, and General Management to solve problems so that the supply chain operates more effectively. Much of our work in this class will be focused on ways organizations use SCM principles to reduce cost, improve operational efficiency and achieve high levels of customer satisfaction across the supply chain. We will use practical examples to illustrate these principles.

Course Prerequisites: Admission to the C. T. Bauer MBA Program.

### II. Course Objectives

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

### III. Course Materials

- **Textbook:** *Operations and Supply Chain Management: The Core*, F. Robert Jacobs & Richard B. Chase, 3<sup>rd</sup> ed.(2013) ISBN 978-0-07-352523-5
- Case studies from Harvard, Ivey and other business schools: HBS Cases <https://cb.hbsp.harvard.edu/cbmp/access/44532855>
- *Readings:* Various assigned and suggested readings - see the course schedule. Available via UofH library system Supply Chain Management Webpage. Follow the link below, then click on SCM Course Pages; then choose SCM 6301/6A01 Production & Operations Management (Smith).

<http://guides.lib.uh.edu/scm>

To access the articles listed on the Supply Chain Management webpage or other University of Houston Libraries electronic resources a **CougarNet Login** is required. Please contact UH Campus IT at (713) 743-1411 or visit their website <http://www.uh.edu/infotech/>

**Class Participation:** To foster a productive learning environment, it is important that everyone come to class prepared and willing to contribute to discussion. Ideally, you will make concise, insightful, and

eloquent comments in every class. However, I also recognize the importance of making smaller contributions, including asking good questions. I believe that the learning environment is best when the discussion is not dominated by a few, but moved along incrementally by all of us. Do not be afraid to make points that you may regard as minor, ask clarifying questions, or otherwise contribute in small ways.

**Feedback:** Your informal and formal feedback is very important to me. Please let me know throughout the semester if there is anything I can do to make this class better for you.

#### IV. Performance Evaluation

<u>Item</u>	<u>Percent</u>
Examination 1	35
Examination 2	30
Quizzes and Homework	25
<u>In Class Performance</u>	<u>10</u>
<b>Total</b>	<b>100</b>

Information about Exams/Quizzes/Homework

1. Exam Content: The exams will cover all material from lectures, readings, videos, and study problems since the prior exam.
2. Quiz/Homework content: There will be multiple quizzes and homework assignments. Some quizzes will be announced, others may not. Best 5 scores on quizzes/homework will be used. Preparing notes on the discussion questions and working assigned problems will enhance your performance on quizzes.
3. Exam/Quiz Format: All exams and quizzes will be closed book and closed notes. The instructor will provide mathematical formulas and statistical tables required for the exam. Exam format are a balance of multiple-choice, short answer questions and problems. If a quiz is missed due to illness, job related reasons, etc, that quiz will be dropped if enough quiz/homework assignments have been taken to meet the 5 requirement.
4. Exam Materials: The student must bring a calculator (no cell phones) to each exam.
5. Make-Up Policy: Exams/quizzes may not be missed at the convenience of the student. If an exam is missed due to an approved university absence, you must inform the instructor no later than 48 hours after the exam (before the exam is preferred) to schedule a make-up. There will be no make-ups for missed exams without a university approved excuse. Except under unusual circumstances, make-up exams will be held within 7 days of the original scheduled date.

#### V. Accommodations for Students with Disabilities

Our objective is to help all students achieve their highest potential in the Bauer College of Business. If you need to receive accommodation in the classroom, on exams or with assignments, please make arrangements with your instructor prior to the exam or assignment. You can also contact the Justin Dart Center for Students with Disabilities (713-743-5400) in order to obtain assistance. Services provided by the Center for Students with Disabilities include assistance with course accommodations, adaptive equipment, individualized exam administration, taped textbooks, wheelchair repair, library needs, handicapped parking, as well as many other needs.

#### VI. Academic Integrity

All students are expected to be familiar with the University of Houston Academic Honesty policy that is published in the graduate catalog. In particular, the following four principles apply to this class:

- All homework assignments and exams should reflect *your own effort only* (except as noted above for assignments where work with other students is documented). Discussion with others from another section about graded submissions is a violation of the Academic Honesty Policy.

- **Passing cases, case notes and class handouts to students who have yet to take the course, who attend a different section, or receiving material from those who took the class in the past, is *strictly* prohibited.**
- Plagiarizing (the misrepresentation of work done by others as being one's own work) is a violation of the Academic Honesty Policy. Remember to cite all sources of information and ideas to prevent problems.
- You may *not* submit the same work (or substantially similar work) to meet the requirements of more than one course without the written consent of all instructors concerned.

Plagiarism is defined as “representing as one’s own work the work of another without appropriately acknowledging the source.”

Fundamentally, plagiarism is a deceit, an act of intellectual dishonesty that consists of passing off another’s words as one’s own. Plagiarism may take the form of repeating another’s sentences as your own, paraphrasing someone else’s argument as your own or even presenting someone else’s line of thinking in the development of a thesis as though it were your own. In short, to plagiarize is to give the impression that you have written or thought something that you have in fact borrowed from another. Although a writer may use other persons’ words and thoughts, they must be acknowledged as such.<sup>1</sup>

Please make certain that your work clearly acknowledges that of others. Plagiarism is a serious violation of academic honesty and may result in a failing grade and possibly more severe action. The university does not institutionalize plagiarism by acknowledging, excusing or condoning ignorance under the rubric of “unintentional plagiarism”.

## VII. Blackboard/Tentative Class Schedule

We will be using Blackboard to provide additional course-related materials, forums for outside class discussions, study guides, grade posting, etc. In addition, ***I ask that you use Blackboard email rather than university email for all class-related business.***

An outline of the semester topics, readings and case studies is presented below. Changes will be made as necessary.

<b>Class Schedule SCM 6A01 Section 19286 Spring 2016</b>			
<b>Session</b>	<b>Date</b>	<b>Chapter/Topic and Readings</b>	<b>Chapter; Assignment; Deliverable</b>
<b>1</b>	<b>Jan 19</b>	<b>Intro to Supply Chain Management:</b> <ul style="list-style-type: none"> <li>• What is a supply chain?</li> <li>• Importance of supply chain decisions</li> <li>• Evolution into the future</li> <li>• Conceptual model of Transformation Process</li> </ul>	<b>Read: J&amp;C Ch1</b>  <b>Read: “Operations-Based Strategy”</b> (California Management Review Vol 40, n.4, pp. 8-25, Summer, 1998)  <b>Read: “What is the Right Supply Chain for Your Product?”</b> (HBR March/April 97, p105-116)
		<b>Operations and Supply Chain Strategy:</b> <ul style="list-style-type: none"> <li>• How does supply chain strategy relate to marketing and finance?</li> <li>• What are the competitive dimensions of operations strategy?</li> <li>• How do order winners and qualifiers relate to operations strategy?</li> <li>• What role does strategic fit play in evaluating a firm’s operations strategy?</li> </ul>	<b>Read: J&amp;C Ch2</b>  <b>Assignment 1: Due next class. Complete the Analytics Exercise: Comparing Companies Using Wall Street Efficiency measures as described on page 22 of the text. Prepare a two page summary of your findings. The format is:</b> <ul style="list-style-type: none"> <li>• List the companies and industries</li> <li>• Prepare a table with the comparative statistics of the companies</li> <li>• Insights and Conclusions</li> </ul>
<b>2</b>	<b>Jan 26</b>	<b>Supply Chain Strategy and Operations Processes</b> <ul style="list-style-type: none"> <li>• Concepts and Metrics</li> <li>• Evaluation</li> </ul>	<b>Read: J&amp;C Ch6 pp. 172-177, 180-184</b>  <b>Case: “The Tao of Timbuk2” (pp. 43-44)</b> <b>Videos:</b> <a href="http://www.timbuk2.com/content/about-manufacturing.html">http://www.timbuk2.com/content/about-manufacturing.html</a> <a href="https://www.youtube.com/watch?v=tYyQpSI7TtQ">https://www.youtube.com/watch?v=tYyQpSI7TtQ</a>  <b>Read: “Rapid Fire Fulfillment” (HBR Nov 2004)</b>
		<b>Supply Chain Strategy and Operations Processes: Service Systems</b>	<b>Case: “Benihana of Tokyo” HBS#9-673-057</b> <ol style="list-style-type: none"> <li>1. Examine the service system of Benihana of Tokyo. What are the flows? Where are the inventories held?</li> <li>2. What are the key ingredients in Benihana’s successful recipe?</li> </ol>

			<p>Compare Benihana's operating ratios with those of a typical restaurant.</p> <p>3. What is the relationship between Benihana's marketing and operations strategies?</p>
3	Feb 2	<p><b>Project Management: Overview, Critical Path and Risk Management in Projects</b></p>	<p>Read: J&amp;C Ch 5</p> <p>Assignment 2: Due February 9<sup>th</sup> at the start of class. Work problems 2, 3, 4, 5, 6, 8, and 11.</p> <p>Read: Normal Curve (see blackboard)</p> <p>Read: "Superefficient Company" (HBR September 2001)</p> <p>Read: "Supply Chain Strategies: Which One Hits the Mark?" (Supply Chain Quarterly, Qtr 1, 2013)</p>
4	Feb 9	<p><b>Business Forecasting</b> Visit the following website to see how leading economic indicators can be used in medium/long term forecasting. <a href="http://usatoday30.usatoday.com/money/economy/story/Economic-Outlook/35290148/1">http://usatoday30.usatoday.com/money/economy/story/Economic-Outlook/35290148/1</a></p>	<p>Read: J&amp;C Ch 3 pp. 46-59, 69-72, 75-79</p> <p>Assignment 3: Due February 16<sup>th</sup> at the start of class (see Blackboard)</p> <p>Read: "Three Forecasting Building Blocks for Supply Chain Excellence" (Chief Supply Chain Officer Magazine, November 2005) (Posted on BlackBoard)</p>
5	<u>February 16</u>	<p><b>Examination #1 (Readings, cases, problems and class discussion)</b></p>	<p>Format: One hour 75 minute duration with a mix of multiple choice, short answer, and problems. Equations will be provided. Bring calculator to exam.</p>
		<p><b>Inventory Management: Newsvendor and Order Point Systems</b></p>	<p>Read: J&amp;C Ch 11 pp. 352-368</p> <p>Assignment 4: Due date March 3rd at the start of class. (see blackboard)</p>
6	Feb 23	<p><b>Inventory Management: Safety Stock</b></p>	<p>Read: J&amp;C Ch 11, pp. 368-372</p>
		<p><b>Inventory Management: Purchase Discounts and Policies</b></p>	<p>Read: J&amp;C Ch 11, pp. 375-383</p>
7	Mar 1	<p><b>Location, Logistics and Distribution</b></p>	<p>Read: J&amp;C Ch 14, pp. 450-471</p> <p>Read: "The Gartner Supply Chain Top 25 for 2015" (Gartner Research, 21 May 2014 ID #: G00264011)</p> <p>Case: "AmazonFresh: Rekindling the Online Grocery Market" (HBS #9-615-013)</p>

		<b>Supply Chains: The Last Mile</b>	<i>Case: "Mission Impossible? Yummy77 Delivers Groceries within the Hour"</i> (HBS #9-916-025)
	<b><u>March 8</u></b>	<b>Examination #2 (Readings, cases, problems and class discussion) Exam from 5:00PM until 7:00PM.</b>	<b>Format: Two hour duration with a mix of multiple choice, short answer, and problems. Equations will be provided. Bring calculator to exam.</b>