

SCM 6A01: Supply Chain Management Concepts

Spring 2023

Department of Decision and Information Sciences

C. T. Bauer College of Business, University of Houston

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Class time: SCM 6A01 (12935); Location– MH 112; 6.00 pm – 9.00 pm CT; Tuesday
Office hours: 3.00 pm – 4.00 pm CT Thursday or by appointment

Course Description

This course aims to introduce the students to the core concepts, issues, and strategies used to plan, analyze, and control supply chain processes. The course also emphasizes critical strategic and operational issues at the enterprise and supply chain levels for strengthening both manufacturing and service systems.

Course Prerequisites

Prerequisite: Admission to a C.T. Bauer Graduate Program.

Course Objectives

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

Course Materials

Textbook: *Operations and Supply Chain Management: The Core*, 6th edition, by F. Robert Jacobs and Richard B. Chase, McGraw-Hill Irwin, 2023. ISBN10: 1266292802 / ISBN13: 9781266292804.

Case Studies/Readings: A course pack for this section is available on Harvard Business Online. You may access relevant case studies and associated materials in this link: <https://hbsp.harvard.edu/import/1019068>. You need to register with this site to access the materials in a cost-effective way.

In addition, this course will use other materials such as published studies/articles and online contents. Those additional reading materials will be shared through Blackboard.

Structure of the Course

This course will meet in-person once a week. Therefore, every session is important. Class activities are designed to discuss the material covered by the cases and readings. These activities complement the key ideas and skills presented in the course materials. To effectively learn and contribute to these sessions, you should read the course materials for each class and reflect on them before, during, and after each session. All essential and

optional reading materials will be communicated before the respective classes. The course activities such as homework, suggested cases or problems, quizzes, and exams provide opportunities to apply the concepts learned in the course and demonstrate knowledge of the associated materials. Please email the instructor for additional office hours if you need further academic support on any topic and activity related to this course.

Performance Evaluation

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

Grade Calculation	Percentage
Exam 1	30%
Exam 2	30%
Homework/quizzes	25%
In-class performance	15%
Total	100%

Exam 1: It will measure the mastery of the course materials. The exam will be closed book and closed notes. The instructor will provide all formulas and data tables as needed. The exam will cover all material from lectures, readings, videos, exercises, study problems, etc. The exam format will be discussed during class time. Each student will be allowed to use a regular calculator during the exam; however, cell phones or tablet devices should not be used instead of calculators. The exam will be administered using the Respondus Monitor and LockDown Browser.

Exam 2: This exam will follow a similar format as Exam 1. It will also measure the mastery of the course materials. The exam will be closed book and closed notes. The instructor will provide all formulas and data tables as needed. Each student will be allowed to use a regular calculator during the exam; however, cell phones or tablet devices should not be used instead of calculators. The exam will be administered using the Respondus Monitor and LockDown Browser. The contents of this exam will cover all topics from exam 1 as well as remaining course materials. The exam format will be discussed during class time.

Quizzes/Homework Assignments: There will be multiple quizzes and homework during this semester. No late work will be accepted. Technical problems such as computer errors or connectivity issues should be checked before each assignment to prevent potential delays as those will not be considered as excuses. Missed assignments will be counted as the lowest grade and will be dropped at the end of the semester.

Each assignment will reflect on the knowledge of the materials studied or discussed in earlier classes. Quizzes and homework assignments must be done individually by each student and those should not be shared with anyone. Possible ways to achieve success in those activities may include reviewing course presentations and reading materials, taking notes on classes and discussions, working on assigned cases or problems during this semester.

Class Participation: Every class session is important as the core concepts of supply chain management and their applications will be discussed during these sessions. Moreover, the flow and contents of these sessions are organized in a way that every class will require a clear understanding of past sessions. Each student is expected to actively participate during these meetings. Active contributions are more than just class attendance- they may include reflecting on complex ideas, discussing problems and possible solutions, and enriching the class sessions through any form of scholarly inputs. 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

This syllabus contains the dates of the exams so that you can plan your other activities accordingly and prevent potential conflicts with exam 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 and contents of the exam may be different than the original exam.

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. **Excused Absence Policy:** Regular class attendance, participation, and engagement in coursework are important contributors to student success. Absences may be excused as provided in the University of Houston Graduate Excused Absence Policy for reasons including: medical illness of student or close relative, death of a close family member, legal or government proceeding that a student is obligated to attend, recognized professional and educational activities where the student is presenting, and University-sponsored activity or athletic competition. Additional policies address absences related to military service, religious holy days, pregnancy and related conditions, and disability.
2. **Technology Use during the Sessions:** It is expected that you attend to every session on time and stay until the end of the session and be ready to participate in the discussion. In order to avoid any distraction during sessions, please close all non-course related programs/websites (email, Internet sites, chat, etc.) on your computers and put your cell phones on silent before joining the class sessions.
3. **Recording of Class:** Students may not record all or part of class, livestream all or part of class, or make/distribute screen captures, without advanced written consent of the instructor. If you have or think you may have a disability such that you need to record class-related activities, please contact the Center for Students with Disabilities. If you have an accommodation to record class-related activities, those recordings may not be shared with any other student, whether in this course or not, or with any other person or on any other platform. Classes may be recorded by the instructor. Students may use instructor's recordings for their own studying and notetaking. Instructor's recordings are not authorized to be shared with anyone without the prior written approval of the instructor. Failure to comply with requirements regarding recordings will result in a disciplinary referral to the Dean of Students Office and may result in disciplinary action.
4. **Resources for Online Learning:** The University of Houston is committed to student success, and provides information to optimize the online learning experience through our Power-On website. Please visit this website for a comprehensive set of resources, tools, and tips including: obtaining access to the internet, AccessUH, and Blackboard; requesting a laptop through the Laptop Loaner Program; using your smartphone as a webcam; and downloading Microsoft Office 365 at no cost. For questions or assistance contact UHOnline@uh.edu.
5. **Student Communication:** It is expected that you follow rules of common courtesy in all course communication including, but not limited to email messages, discussions, and chats. All communication should be civilized and respectful to all. Course tools also need to be used in a respectful manner. Any disruptive behavior or activity will not be tolerated.
6. **Office Hours:** Office hours can be helpful to improve course outcomes addressing individual academic problems. I will be available for regular office hours via Zoom (link available on Blackboard). If the

office hours are not convenient for you, or you need to meet at an alternate time for other reasons, please email me for additional arrangements. If you are struggling with a topic or need to discuss the coursework or any assignments, I strongly encourage you to contact me at the earliest.

7. **Study Groups:** It would be useful to form study groups for this course. Groups can be great forum for sharing additional resources on class topics, information regarding missed sessions, a venue for discussing assignments, and preparing for exams adhering to ethical standards.
8. **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.
9. **Respondus Monitor and LockDown Browser:** LockDown Browser is a locked browser for taking tests in Blackboard Learn. It prevents the user from printing, copying, going to another URL, or accessing other applications during a test. When a Blackboard test requires that LockDown Browser be used, you will not be able to take the test with a standard web browser.

LockDown Browser should only be used for taking Blackboard tests. It should not be used in other areas of Blackboard. You will be required to use LockDown Browser with a webcam, which will record you during an online exam/quiz. (The webcam feature is sometimes referred to as "Respondus Monitor."). You must have a reliable computer with a functioning webcam and a microphone. A broadband connection is also required.

You will take both exams and the quizzes using Respondus Monitor and LockDown Browser. You can find more information about Respondus Monitor and LockDown Browser and how to download the software on Blackboard. In order to test out the software, your equipment and connection, you will be required to take a test quiz (which will not be graded) at the beginning of the semester.

Important Reminders About Completing Assignments & Taking Tests Online

Please be mindful of deadlines, testing dates, account logins, and your computer equipment. Recommendations for successful completion of the exam:

- Avoid taking exams online using a smartphone or smart device. Use a computer- laptop or desktop.
- Connect your computer to a charger, do not rely on the battery alone.
- Restart and run software updates (Windows or OSX, and Java updates) long before your test time.
- Make sure that your internet connection is stable. Connect to the internet using an Ethernet cable if available.
- During the exam shut off all internet devices, including cellphones connecting to your local network.
- Save all bandwidth for your exam, tell people sharing your internet not to use it while taking exams, ask them to turn off WiFi on all cellphones during this time.

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. Any student caught providing or receiving assistance on an exam/quiz/homework assignment will immediately be given a grade of "F" for the course.

Students may be asked to sign an honor code statement as part of their submission of any graded work including but not limited to projects, quizzes, and exams: "I understand and agree to abide by the provisions in the ([University of Houston Graduate Academic Honesty Policy](#)). I understand that academic honesty is taken very seriously and, in the cases of violations, penalties may include suspension or expulsion from the University of Houston."

10. **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 week of class 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

11. **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.

Please visit the following sites for helpful information:

COVID-19 Updates and Health FAQs: <https://uh.edu/covid-19/>

Coogs Care: <https://www.uh.edu/dsaes/coogscare/>

Laptop Checkout Requests: <https://www.uh.edu/infotech/about/planning/off-campus/index.php#do-you-need-alaptop>

Student Health Center: <https://uh.edu/class/english/lcc/current-students/student-health-center/index.php>

Course Schedule

❖ Week 1: January 17, 2023

Learning objectives	Reading materials and activities
<p>Operations & Supply Chain Management:</p> <ol style="list-style-type: none"> 1. Identify and understand elements of operations and supply chain management (OSCM) and why it is important to study them. 2. Recognize the major concepts that define operations and supply chain management. 3. Evaluate the efficiency of a firm. 4. Learn about potential career opportunities in operations and supply chain management. 5. Learn how the field has developed over time. 	<ul style="list-style-type: none"> • Overview of the course and syllabus • Chapter 1: Operations and Supply Chain Management, pages 2-20. • Chapter 2: Strategy and Sustainability, pages 24-43. • Article: “What Everyone Gets Wrong About the Never-Ending COVID-19 Supply Chain Crisis”, October 24, 2021, by Yossi Sheffi, Harvard Business Online Course Pack, SMR934-PDF-ENG • Article: “Don’t Tweak Your Supply Chain- Rethink It to the End”, 2010, by Hau Lee, Harvard Business Online Course Pack, R1010C-PDF-ENG • Article: “Coronavirus is a Wake-Up Call for Supply Chain Management”, March 27, 2020, by Thomas Y. Choi; Dale Rogers; Bindiya Vakil, Harvard Business Online Course Pack, H05I9G-PDF-ENG • Additional reading materials posted on Blackboard
<p>Strategy & Sustainability:</p> <ol style="list-style-type: none"> 1. Know what a sustainable business strategy is and how it relates to operations and supply chain management. 2. Define operations and supply chain strategy. 3. Explain how operations and supply chain strategies are implemented. 4. Understand why strategies have implications relative to business risk. 5. Evaluate productivity in operations and supply chain management. 	
<p>Activities: Discussion and Q&A</p>	

❖ Week 2: January 24, 2023

Learning objectives	Reading materials and activities
<p>Supply Chain Strategy & Operational Processes:</p> <ol style="list-style-type: none"> 1. Explain how the learning in the strategy, sustainability, manufacturing, and service processes discussions are applied in practice. 	<ul style="list-style-type: none"> • Article: “Sustainability at IKEA Group,” 2014, by V. Kasturi Rangan, Michael W. Toffel, Vincent Dessain, Jerome Lenhardt; Harvard Business Online Course Pack, 515033-PDF-ENG • Article: “Rapid Fire Fulfillment”, 2004, by Ferdows Kasra; Lewis, Michael A.; Machuca, Jose A.D., Harvard Business Online Coursepack, #R0411G-PDF-ENG • Article: “Dell: Upcycling Ocean Plastics through Supply Chain Innovation” Harvard Business Online Course Pack #W91C21-PDF-ENG • Additional reading materials posted on Blackboard
<p>Activities: In-class Quiz 1, Discussion, and Q&A</p>	

❖ **Week 3: January 31, 2023**

Learning objectives	Reading materials and activities
<p>Manufacturing & Service Processes</p> <ol style="list-style-type: none"> Analyze the competitive priorities of a firm and describe how a firm can build and capitalize on its strengths for developing a successful supply chain strategy. Describe the characteristics of common types of manufacturing processes. Describe and identify components of a service process. Explain how different manufacturing process choices support different market requirements. Describe the critical role of customization in manufacturing, including the degree and point of customization. Discuss the three dimensions that differentiate services from one another - the service package, customization, and customer contact and explain the different managerial challenges driven by these dimensions. 	<ul style="list-style-type: none"> Chapter 6: Manufacturing Processes, pages 170-198. Chapter 7: Service Processes, pages 206-235. Article: Benihana of Tokyo, Harvard Business Online Course Pack, HBS#9-673-057 Additional reading materials posted on Blackboard
<p>Activities: In-class Quiz 2, Discussion, and Q&A</p>	

❖ **Week 4: February 7, 2023**

Learning objectives	Reading materials and activities
<p>Exam 1</p>	<ul style="list-style-type: none"> In-class exam Please see instructions on Blackboard
<p>Activities: Discussion and Q&A</p>	

❖ **Week 5: February 14, 2023**

Learning objectives	Reading materials and activities
<p>Project Management</p> <ol style="list-style-type: none"> Explain what project management is and why it is important. Identify the different ways projects can be organized. Understand the concept of Earned Value Management. Determine the “critical path” for a project. Show how activity time uncertainty can be analyzed in projects. Demonstrate how to “crash,” or reduce the length, of a project. 	<ul style="list-style-type: none"> Chapter 4: Learning curve, pages 116-126 Chapter 5: Projects, pages 130-161 Additional reading materials posted on Blackboard
<p>Activities: Discussion, Homework- <i>Developing a successful supply chain strategy</i>, and Q&A</p>	

❖ **Week 6: February 21, 2023**

Learning objectives	Reading materials and activities
<p>Business Forecasting</p> <ol style="list-style-type: none"> 1. Understand how forecasting is essential to logistics planning. 2. Select the most appropriate forecasting approach, given different forecasting situations. 3. Describe the basic qualitative forecasting techniques and explain when they should be used. 4. Apply a variety of time series forecasting models, including moving average and exponential smoothing models. 5. Calculate measures of forecasting accuracy and interpret the results. 6. Describe the benefits of using computer-based forecasting packages. 7. Describe the benefit and application of collaborative forecasting techniques. 	<ul style="list-style-type: none"> • Chapter 3: Forecasting, pages 46-59, 66-75. • Additional reading materials posted on Blackboard
<p>Activities: In-class Quiz 3, Discussion, and Q&A</p>	

❖ **Week 7: February 28, 2023**

Learning objectives	Reading materials and activities
<p>Course wrap-up</p> <ol style="list-style-type: none"> 1. Reflect on the topics covered in this course and the impacts of successful supply chain management practices 2. Describe how a firm can build and capitalize on its strengths for developing a successful supply chain strategy. 	<ul style="list-style-type: none"> • Reading materials posted on Blackboard
<p>Activities: In-class Quiz 4, Discussion, and Q&A</p>	

❖ **Week 8: March 7, 2023**

Learning objectives	Reading materials and activities
<p>Exam 2</p>	<ul style="list-style-type: none"> • In-class exam • Please see instructions on Blackboard
<p>Activities: Discussion and Q&A</p>	