

The Hong Kong University of Science and Technology
Department of ISOM
ISOM 3770 Global Supply Chain Management
Spring Semester 2020-2021

Number of Credits: 4 credits

Prerequisites: This is a required course with prerequisites ISOM 2700 & 3710

Classes:
L1 Fri 9:00 – 10:20 am (via Zoom)
L2 Wed 3:00 – 4:20 pm (via Zoom)
L3 Tue 10:30 – 11:50 am (via Zoom)
L4 Thu 10:30 – 11:50 am (via Zoom)

Tutorial:
T1 Wed 6:00 – 6:50 pm (via Zoom)
T2 Fri 4:30 – 5:20 pm (via Zoom)
Tutorial is tentatively scheduled on Week 3, 4, 5, 6 and 8.

Instructor: Dr. Ki Ling Cheung **Office:** LSK Room 4021
Phone: 2358-7737 **Email:** imcheung@ust.hk
Office Hours: Wed 4:30 – 5:30 pm
Fri 10:30 – 11:30 am or by appointment (via Zoom)
(Zoom meeting ID: 806 675 0866)

Website: Please visit canvas

Teaching Assistant: Angel So **Office:** LSK Room 4049C
Phone: 2358-5728 **Email:** imso@ust.hk
Office Hours: Wed 5:00 – 6:00 pm
Fri 5:30 – 6:30 pm or by appointment (via Zoom)
(Zoom meeting ID: 303 211 0127)

Course Description:

Supply chain management is one of the fastest growing areas in today's business world. Global companies such as IBM, HP and P&G all acknowledge that by integrating various activities of a company, such as design, demand forecast, supply and transportation, the companies become much more efficient and competitive. This course is focused on the theory and implementation of supply chain management in a real world setting. Upon completion of the course, students will master the essential managerial and technical aspects of supply chain management. To this end we will review the major building blocks of supply chain management as well as their implementations in companies such as HP, Zara and Seven-Eleven Japan among others.

Blending Learning:

This is a case-oriented course. Because of the case approach, students should prepare for a large amount of reading. In addition, a few supply chain games will be played in class. This course will enhance your learning experience by adopting a new blended learning approach. Our goal of using a blended approach is to leverage the best aspects of both face-to-face and online learning for your benefit. Instead of using classroom time for presentation of materials that you can easily learn on your own, we will use the class time to engage you in more in-depth discussions and deepen your understanding of the topics through cases and games. You will further enhance your understanding in certain topics by completing a group project on a real supply chain case. Students are required to follow the weekly online video schedule. Class meetings are opportunities for the students to apply what they have learned and to interact with their peers and instructors. Weekly class meetings are entirely participatory-based, to encourage student engagement with an active learning approach. During weekly class meetings, students can engage in games, simulations, case studies, exercises, and a mix

of these activities. Through this approach, the instructor is in a better position to evaluate the participation of students in case discussion based on the frequency and relevancy of their responses.

Zoom:

Unless we are able to revert to classroom lecture mode before May, all in-class meetings will be replaced by Zoom. Zoom is an easy-to-use, web-based conferencing tool on Microsoft Windows and Mac desktop client, as well as mobiles. Users may choose to record session, collaborate on projects and share screens under a single platform. For details, please see: <https://itsc.ust.hk/services/general-it-services/communication-collaboration/zoom-meeting>

Intended Learning Outcomes:

At the end of this course, students should be able to

1. Identify and analyze some of the most important problems in supply chain management in different industries; (ILO 1, 4)
2. Create supply chain solutions that have been used in practices; (ILO 1, 4)
3. Apply a strategic supply chain perspective to different companies. (ILO 1, 4)

This course will also provide students with the opportunities to develop their abilities to

4. Work effectively in a team and lead a team; (ILO 5)
5. Work with other functions in making supply chain improvement; (ILO 3)
6. Communicate effectively in oral English in assigned task contexts. (ILO 2)

Assessment Scheme:

Your course grade is determined by		
In-class Participation	1%	2 points
On-line Quiz	4%	8 points
Simulation Game	10%	20 points
Final project	15%	30 points
Quiz	30%	60 points
<u>Final exam</u>	<u>40%</u>	<u>80 points</u>
Total	100%	200 points

How you earn participation points: During each in-class session, your active in-class participation will earn you one participation point.

How you earn on-line quiz points: For online learning using the Canvas platform, you are required to complete the quizzes at the end of each learning module. Each correct answer will earn you one point. A maximum of 8 points can be earned during the semester.

Examination: There will be one quiz and one final exam, both open-book and open-notes. The quiz will be held on Mar 10. Detailed information of the final exam will be announced during the semester.

On-line simulation games: There are two on-line computer games to be played in class. You are expected to organize a team with 4 members to play the games.

Final project: At the end of the course your team will conduct a final project and present your findings. This will be a case about a company's supply chain for you to provide analysis and recommendations.

Student learning resources: The required textbook is *Designing and Managing the Supply Chain – Concepts, Strategies, and Case Studies*, by Simchi-Levi, Kaminsky and Simchi-Levi, 2009 third edition, Irwin McGraw-Hill. It is available in the university bookstore. Students can also click the link below to purchase an e-copy of the textbook. It will require students to login with their student account in order to process further. They can search with the ISBN (Print: 9780071270977 or eBook: 9781121060517).

<https://w5.ab.ust.hk/cgi-bin/std CGI.SH/WService=broker ba p/prg/ba stdt main.r>

In addition, extra articles, cases that are not included in textbook and lecture notes will be distributed both electronically and in class. Please visit the following web site in canvas for announcements and downloads.

Article:

1. “Rapid-Fire Fulfillment” by Ferdows, Lewis and Machuca, *Harvard Business Review*, November 2004, p. 1–6.
2. “A Risk-Return Framework for Inventory Management” by K. L. Cheung, *Supply Chain Management Review*, January-February 2002, p. 50-55.

Cases: (Following the sequence)

1. Donner Manufacturing Company
2. Steel Works, Inc.
3. Lamson Corporation (R)
4. Toy World, Inc.
5. Sport Obermeyer, Ltd.
6. HP Deskjet Printer Supply Chain
7. Barilla SpA (A-D)
8. Seven-Eleven Japan Co
9. SF Express: From Delivery to E-Commerce
10. Mission Impossible? Yummy77 Delivers Groceries within the Hour

Laptop Policy: In class, your laptop should only be used for class activities such as working on an in-class case, taking notes, or referring to a spreadsheet. You should not conduct any non-class activities such as social networking or web surfing in class.

Course Schedule

Module 1: Basic Inventory Management in Supply Chains

Week 1	In-class: Online:	Course Introduction Continuous Review Inventory Control Reading: Sections 2.2.6, 2.2.7 of textbook
Week 2	In-class: Online:	Facing Impending Stock-Out and Donner Case Periodic Review Inventory Control: Steel Works Case of Ch. 2 and Service Level Reading: 2.2.8

Module 2: Supply Chain Management Foundations

Week 3	In-class: Online:	Aggregate Planning - Lamson Game What is Supply Chain Management? Reading: 1.1 - 1.6 except 1.2
Week 4	In-class: Online:	Toy World, Inc. Accurate Response: Sport Obermeyer, Ltd. Case of Chapter 3
Week 5	In-class On-line:	Flexible Response: HP Case of Chapter 11 Reading: 11.2.8, 11.4 Risk Pooling and Postponement Reading: 2.3, 6.2.1 - 6.2.3, 11.2.3, 11.2.4
Week 6	In-class: Online:	No class (Quiz on Mar 10) Vendor Managed Inventory: Barilla SpA (A) Case of Chapter 5 Reading: 8.4

Week 7 In-class: Beer Simulation Game (Bring notebook computer)
 Online: Supply Contracts
 Reading: 4.1 – 4.2

Module 3: Designing and Configuring Supply Chains

Week 8 In-class: Quick Response: Zara’s Fast Fashion
 Reading: The “Rapid-Fire Fulfillment” article
 Online: Get Leverage from Logistics
 Reading: 7.1-7.5 except 7.3.3

Week 9/10 In-class: Seven-Eleven Japan Co. Case
 Online: SF Express: From Delivery to E-Commerce

Week 11 In-class: Risk-Based Inventory Planning
 Reading: The “A Risk-Return Framework for Inventory Management” article
 Online: Yummy77 Case

Module 4: Final Projects

Week 12 In-class: Global Supply Chain Simulation (Bring notebook computer)
 Online: Finale (Optional)

Week 13 In-class: **Project Presentation**

Week 14 In-class: **Project Presentation**

Caveat The instructor reserves the right to modify the syllabus if deemed necessary.