Logistics Management

Course Syllabus ISOM 3760 (**Undergraduate Level**)
2025 Fall
(Subject to change)

Instructor:

Ying-Ju Chen

Office: LSK 4076
Email: imchen@ust.hk
Website: http://imchen.people.ust.hk/
Office Hour: By appointment

TA:

Sherry Wu
Office Hour : By appointment
Email : imwuc@ust.hk

Required text & Recommended book:

N/A

Course-related Technology:

Canvas (Course website)

iPRS (Mobile-based Clicker)

GME (Peer evaluation)

Assessment Methods:

Class Participation	10%
In-class exercise	10%
Quiz (Midterm)	20%
Homework	15%
Final	25%
Final Project	20%
Total	**100%**

Late submissions are not accepted

Class Participation:

For this semester class participation will be determined by your IPRS performance. IPRS questions will be given in class without prior notifications, and your submissions will be counted. For each question, successful submission will award you 50% of the total point, and correct answer will award you the other 50%. Thus, a successful submission of a correct answer gets 100%, a successful submission of a wrong answer gets 50%, and a no-show/ no-submission/ unsuccessful submission gets 0%.

In-class exercises

They take place 3-4 times without prior notifications, and are typically at the end of the classes.

Homework

Homework assignments will be announced as the classes go along. <u>Each group submits one report</u>. On each due date, the homework assignment should be submitted online. No late submission is accepted either by the instructor or the TA.

Quizzes & Final Exam

There will be 1 quiz and a final exam (**CLOSED BOOK, CLOSED NOTES**). <u>One-page, double-sided cheat sheets are allowed for the quiz and the final.</u> The time commitment for participating in the exams is essential. Suspected violations of the Code of Student Conduct will be reported to the Office of Student Conduct (or the equivalent authority).

The final exam is cumulative/ comprehensive.

Project:

The project will be an opportunity for you to learn more about logistics management or to put into practice what you have learned in class. Projects should study a specific logistics management practice in a real organization. You are free to choose a topic and an organization of your interest. Your job is to identify and exploit opportunities for logistics improvement in your chosen example.

As broad guidelines for these projects, put yourself in the shoe of a team of analysts trying to analyze some particular issues of an organization that is related to the content of this course. Your study should hopefully culminate with an assessment of the strengths and weaknesses of the associated logistics management practice and some suggestions for improvements. This could roughly follow the following outline:

a. Understand and describe application setting: industry overview, customer characteristics, operations issues, etc.
b. Describe the current logistics management practice.
c. Assess the strengths and weaknesses of the current practice, possibly with an assessment of the magnitude of benefits (harms) brought by the strengths (weaknesses).
d. Propose some improvement opportunities, with as assessment of the difficulty to implement such improvements

You will need to use **<u>REAL DATA</u>** for the majority of parameters/ key inputs of your project, explain how you obtained them, and describe how the model will be solved and what strategies you expect to use. You should also explain how the improvement will be implemented and preferably provide an estimate on the expected magnitude of improvement (justified based on initial data). Basically, you can consider <u>this as a proposal to a company from either a consulting firm or an internal consulting department</u>.

Project (continued):

A one-page proposal is required. In addition, you are expected to prepare the **presentation slides**, even though for this term we **do not request** you to present your proposal. The presentation slides are prepared for an **imaginary 5-minute** presentation of your proposal. Soft copies of these materials should be uploaded to the course website <u>before 11:59pm midnight</u> of **10/19**. Failure to meet the deadline results in 1 point reduction of your final score. No excuse is accepted. Thus, make sure you as a team have access to the course website and get your files ready by then.

The deliverable of the final project will be an **actual 13-minute** presentation. Each team will present the project in-class. It should describe the institutional details of the organization you intend to study, and it should focus on the logistics issues and your proposed solutions. Soft copies of these materials should be uploaded to the course website <u>before 11:59pm midnight</u> of **11/11**. Failure to meet the deadline results in 2-point reduction of your final score. No excuse is accepted.

<u>The evaluation will be done by the entire class as well as the instructor & TA.</u> 30% of your project scores come from peer evaluation, and the remaining 70% comes from the instructor's & TA's judgement. No detailed written report is needed. Also, we will not make the presentation slides available to the entire class to ensure fairness. Note: You are not allowed to use previous projects from other courses to fulfill the requirement.

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Problem identification	Well defined and explained; a large amount of original thought; problem with	Well defined and explained; some original thought; problem with	Interesting problem identified, but there is little evidence of original thinking, or	It is not clear what the real problem is
Model and Data	Appropriate and rigorous model but yet not overly complicated; Excellent plan for data collection	Appropriate and rigorous model, but some fine-tuning is required; Some good ideas of how data can be collected	Appropriate model, but major adjustment is required; Little idea of how data can be collected	Inappropriate model, and/or major errors in the model; No idea on how data can be collected
Implementation Planning	Concrete and comprehensive plans; show considerations for all key issues; specific on how to measure the benefit	Good and realistic plan for data collection and improvement implementation	There are some good points in the plan, but the plan is either too vague or some ideas are unrealistic	No or little clue about what data is needed and how the improvement should be implemented; Or plans are unrealistic and illogical
Delivery	Excellent use of visuals; very clear and concise flow of ideas; demonstrate and stimulate passion	Good use of visuals; clear flow of ideas; demonstrate interest	Limited and/or not so good use of visuals; ideas presented but focus is lost at times; limited evidence of interest	No use of visuals; hard to follow ideas; lack of enthusiasm and interest
Response to questions/comments	Excellent response; demonstrate in-depth consideration of all issues	Good response; demonstrate in-depth considerations of most issues	Satisfactory response; demonstrate considerations of some of the issues	Limited response; demonstrate a lack of considerations of significant issues

Team Members Peer Evaluation

You will assess all team members for the group assignments using the following rubric. For each category, evaluate each team member and give a grade. All responses are confidential. You must submit it by the deadlines. Failure to do so for each group assignment will reduce your own total score by 1 point. The instructor and the TA retain the right to adjust individual grade of the homework assignments and the final project based on these peer evaluations.

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Attendance	Attend almost all meetings and all classes; inform and/or seek agreement of the team before absence	Attend most of the meetings and classes; inform and/or seek agreement of the team before absence	Attend at least half of the meetings and classes; inform and/or seek agreement of team before most absences	Frequently miss meetings or classes; Or fail to inform the team before absence
Contribution	Contributes a lot of effort; routinely provides useful ideas in team meetings and class discussions	Tries hard to contribute; usually provides useful ideas in team meetings and class discussions	Does what is required; sometimes provides useful ideas in team meetings and class discussions	May refuse to participate; rarely provides useful ideas in team meetings and class discussions
Quality of work	Provides work of highest quality that impresses other team members	Provides work of high quality that meets expectations of other team members	Provides work that occasionally needs to be redone by other team members to ensure quality	Provides work that usually needs to be redone by other team members to ensure quality
Working with others	Always listens and show support to other team members; always help to keep the team work well together	Usually listens to and show supports to others; may talk too much, but does not	Rarely listens, but still shows support to other team members; sometimes not a good team member	Never show support to other team members; often not a good team member
Time management	Always does the assigned work without having to be reminded; no need to adjust deadlines or work responsibilities because of him/her	Usually does the assigned work; rarely needs reminding; no need to adjust deadlines or work	Often needs reminding; occasionally adjust deadlines or work responsibilities	Rarely get things done by deadlines; always have to adjust deadlines or work responsibilities

Course Objectives / Learning Goals:

This course aims to provide you with a fundamental overview of the logistics function in business. You will develop a conceptual understanding of the various issues, problems and realities arising in different aspects of logistics. Emphasis will be put on critical analysis of real logistics problems encountered in business, as well as communication skills that will help you share your thoughts and analysis effectively with peers, colleagues and clients.

Course Learning Outcomes

The course learning goals comply with the educational objectives of the BBA-OM program. Upon completion of the course, you will be able to:

- Illustrate the basic logistics management concepts and the role of logistics management in firms (PILO 1, 3, 4)

- Explain the key logistics processes and operations and their inter-relationships (PILO 2)

- Examine various problems faced by logistics managers on functional, business and company- wide basis (PILO 1, 3, 4, 8)

- Evaluate critically the applicability of various logistics strategies on different situations

- Communicate your ideas effectively through discussions, presentations and written documents (PILO 2, 5)

Tentative schedule:

This outline may be modified from time to time, depending on timing and interests.

Session	Date	Topics	Assignment
1	09/01 Mon	L1: Introduction & syllabus	
2	09/03 Wed	L2: Time horizon	
3	09/08 Mon	L3: Cost analysis and Risk	
4	09/10 Wed	L4: EOQ graphical analysis	09/13 Add/Drop ends
5	09/15 Mon	L5: EOQ + pricing & others	
6	09/17 Wed	L6: Newsvendor	
7	09/22 Mon	L7: Newsvendor+ channel & competition	HW1 distributed
8	09/24 Wed	L8: Inventory Planning I	
9	09/29 Mon	L9: Inventory Planning II	
10	10/01 Wed	Holiday	
11	10/06 Mon	Review session 1	HW1 due midnight of previous day/ Peer evaluation due
12	10/08 Wed	Midterm	
13	10/13 Mon	L11: Container/Vehicle consolidation	
14	10/15 Wed	L12: TSP heuristics	
15	10/20 Mon	L13: VRP heuristics	Project proposal due midnight of previous day
16	10/22 Wed	L15: Facility location	
17	10/27 Mon	L16: Purchasing	HW2 distributed
18	10/29 Wed	Holiday	
19	11/03 Mon	Customer valuation game	
20	11/05 Wed	L17: Dynamic pricing/ limitation	
21	11/10 Mon	Project & HW preparation (Class cancelled)	HW2 due/ Peer evaluation due
22	11/12 Wed	Project	Presentation Slides due midnight of previous day
23	11/17 Mon	Project	
24	11/19 Wed	Project	
25	11/24 Mon	Project	
26	11/26 Wed	Review session 2	Peer evaluation due
27			
28			
29			

Prof. Ying-Ju Chen