

Annexe A: New/Revised Course Content in OBTL+ Format

Course Overview

Expected Implementation in Academic Year (New format)	AY2023-2024
Semester/Trimester/Others (specify approx. Start/End date)	Semester 1
Course Author * Faculty proposing/revising the course	Lee-Chua Lee Hong
Course Author Email	clhlee@ntu.edu.sg
Course Title	Shipping Logistics
Course Code	MT4001
Academic Units	3
Contact Hours	39
Research Experience Components	Not Applicable

Course Requisites (if applicable)

Pre-requisites	
Co-requisites	
Pre-requisite to	
Mutually exclusive to	
Replacement course to	
Remarks (if any)	

Course Aims

The main objective of the course is to introduce basic concepts in logistics with a special emphasis on maritime shipping, and to equip students with a broad and comprehensive understanding of its role in the efficient operations of logistics in the shipping industry.

Course's Intended Learning Outcomes (ILOs)

Upon the successful completion of this course, you (student) would be able to:

ILO 1	Describe the basic concepts of logistics and supply chain and their connections to operations
ILO 2	Explain what are the elements, processes and drivers to achieve strategic fit in order to meet desired supply chain strategies
ILO 3	Identify the key logistics activities or services provided by shipping companies or logistics service providers
ILO 4	Evaluate and analyse quantitatively among different variables to achieve optimal inventory strategies and coordination in supply chain management
ILO 5	Explore the key parts of the shipping logistics system by developing analytic models to address practical problems.
ILO 6	Analyse the supply and demand balance to formulate the optimal price to maximize revenue

Course Content

No	Topic	Lecture	Tutorial
1.	Introduction to supply chain management	4	2
2.	Key logistics activities and total cost concept	2	1
3.	Logistics services of shipping companies	2	1
4.	Just-in-time concept and practices	2	1
5.	Achieving strategic fit in shipping logistics and its supply chain drivers	2	1
6.	Introduction of operations management in logistics processes	2	1
7.	Customer services in shipping logistics	2	1
8.	Scheduling in supply chain management	2	1
9.	Cycle inventory (EOQ)	2	1
10.	Quantity discount & supply chain coordination	2	1
11	Bullwhip effect	2	1
12	Revenue management in supply chain	2	1
	Total	26	13

Reading and References (if applicable)

List of references used in the course:

Readings are revised year to year to keep up with the latest development in the subject. Other more classic readings are mostly from the following book:

1. Chopra & Meindl. 2013. Supply Chain Management – Strategy, Planning & Operations (5th Edition), Pearson

Planned Schedule

Week or Session	Topics or Themes	ILO	Delivery Mode	Activities	Readings
1	Introduction to supply chain management	1	In-person	Tutorial and lectures	
2	Introduction to supply chain management	1	In-person	Tutorial and lectures	
3	Key logistics activities and total cost concept	1	In-person	Tutorial and lectures	
4	Logistics services of shipping companies	3	In-person	Tutorial and lectures	
5	Just-in-time concept and practices	3	In-person	Tutorial and lectures	
6	Achieving strategic fit in shipping logistics and its supply chain drivers	2	In-person	Tutorial and lectures	
7	Introduction of operations management in logistics processes	2	In-person	Tutorial and lectures	
8	Customer services in shipping logistics	3	In-person	Tutorial and lectures	
9	Scheduling in supply chain management	5	In-person	Tutorial and lectures	
10	Cycle inventory (EOQ)	4	In-person	Tutorial and lectures	
11	Quantity discount & supply chain coordination	4	In-person	Tutorial and lectures	
12	Bullwhip effect	5	In-person	Tutorial and lectures	

Week or Session	Topics or Themes	ILO	Delivery Mode	Activities	Readings
13	Revenue management in supply chain	6	In-person	Tutorial and lectures	

Learning and Teaching Approach

Approach	How does this approach support you in achieving the learning outcomes?
Lectures	This provides you with the needed background for outcomes (1) to (6) and to allow you to apply principles, methodologies and considerations related to strategy planning, implementation, and operational management in the port industry.
Tutorials	Comprises mostly qualitative questions, where most of which are open-ended case questions. Some quantitative questions are also included to provide practices for practical data-based analysis. The tutorials offer you with opportunities to analyse practical problems that address outcomes (1) to (6).

Assessment Structure

Assessment Components (includes both continuous and summative assessment)

No.	Component	ILO	Related PLO or Accreditation	Weightage	Description of Assessment Component	Team/Individual	Rubrics	Level of Understanding
1	Continuous Assessment (CA): Test/Quiz(CA1: Quiz)	1 - 3	A, C, F, G, H	20		Individual	Analytic	Multistructural
2	Continuous Assessment (CA): Test/Quiz(CA2: Quiz)	4 - 5	A, C, F, G, H	20		Individual	Analytic	Multistructural
3	Summative Assessment (EXAM): Final exam(Final examination)	1 - 6	A-H, L	60		Individual	Holistic	Relational

Description of Assessment Components (if applicable)

Programme Learning Outcomes

Competency

- A. Develop an overall awareness of maritime activities, port and shipping industry and their association with economy and trade.
- B. Describe and apply concepts and theories in sub-fields as contributing to the maritime industry and integrate various related themes, skills and knowledge
- C. Understand and manage the maritime environment
- D. Apply related information pertaining to procedures, operations and management of maritime entities and operational issues in the maritime industry
- E. Capture and analyse market data using analytical tools, conduct related research in the maritime arena, as well as design, develop and execute maritime projects
- F. Engage in lifelong learning in preparation for current and future vocations and career options in the maritime environment.

Creativity

- G. Approach and solve basic maritime problems, through both strategic and research methods, and put theoretical knowledge into practical applications in related industries
- H. Develop maritime related risk management strategies.

Communications

- I. Communicate shipping and maritime management in policy, strategy, and prevailing issues and requirements in an organization and to achieve good teamwork.
- J. Write professional reports and conduct public speaking confidently

Character

- K. Recognise the importance of a strong and just leadership, comply to ethical standards, and uphold highest standards of integrity as a professional

Civic Mindedness

- L. Integrate all related skills and knowledge into the industry and exercise due diligence as a highly responsible professional, contributing towards nation and the society.

Formative Feedback

The lectures shall be interactive where your (students) inputs are highly encouraged in the process.

Instructors will take questions during and at end of lectures, and provide on-the-spot clarifications. You (students) can also confer with instructors at tutorials/discussions, at appointed consultations or via email.

You (students) are assessed two quizzes and a final exam. Students are assessed on two 45-minute quiz consisting of MCQ and short questions. Feedbacks are given for the quiz in terms of instructors going through common mistakes made by students.

NTU Graduate Attributes/Competency Mapping

This course intends to develop the following graduate attributes and competencies (maximum 5 most relevant)

Attributes/Competency	Level
Decision Making	Intermediate
Global Perspective	Basic
Systems Thinking	Basic

Course Policy

Policy (Academic Integrity)

Good academic work depends on honesty and ethical behaviour. The quality of your work as a student relies on adhering to the principles of academic integrity and to the NTU Honour Code, a set of values shared by the whole university community. Truth, Trust and Justice are at the core of NTU's shared values. As a student, it is important that you recognize your responsibilities in understanding and applying the principles of academic integrity in all the work you do at NTU. Not knowing what is involved in maintaining academic integrity does not excuse academic dishonesty. You need to actively equip yourself with strategies to avoid all forms of academic dishonesty, including plagiarism, academic fraud, collusion and cheating. If you are uncertain of the definitions of any of these terms, you should go to the academic integrity website for more information. On the use of technological tools (such as Generative AI tools), different courses / assignments have different intended learning outcomes. Students should refer to the specific assignment instructions on their use and requirements and/or consult your instructors on how you can use these tools to help your learning. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

Policy (General)

Students are expected to take responsibility to follow up with course notes, assignments and course related announcements. You are also expected to participate in class discussions and submit the project report before the stipulated deadline.

Policy (Absenteeism)

Valid reasons include falling sick supported by a medical certificate and participation in NTU's approved activities supported by an excuse letter from the relevant bodies. There will be no make-up opportunities for in-class activities.

Policy (Others, if applicable)

This course will adopt NTU's policy on the use of AI for take-home assignments and reports, and project reports and presentation slides. More details could be found via the link [https://entuedu.sharepoint.com/sites/Student/dept/ctlp/SitePages/Exploring-the-Impact-of-Generative-Artificial-Intelligence-\(GAI\)-Tools-on-Education.aspx#1-proper-citations-and-acknowledgements](https://entuedu.sharepoint.com/sites/Student/dept/ctlp/SitePages/Exploring-the-Impact-of-Generative-Artificial-Intelligence-(GAI)-Tools-on-Education.aspx#1-proper-citations-and-acknowledgements)

Last Updated Date: 08-05-2026 09:19:32

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