

# MT4001 SHIPPING LOGISTICS

Academic Year	2023-24	Semester	1
Course Coordinator	Dr Kelvin Pang		
Course Type	Core		
Pre-requisites	Nil		
AU	3		
Grading	Letter Grading		
Contact Hours	39 (Lecture: 26 Hours; Tutorial: 13 Hours)		
Proposal Date	19 June 2023		

## 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.

## Intended Learning Outcomes (ILO)

By the end of this course, student will be able to:

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

#### Assessment (Includes both continuous and summative assessment)

Component	ILO Tested	EAB Graduate Attributes	Weightage	Team / Individual	Rubrics
1. CA1: Quiz	1 - 3	A, C, F, G, H	20%	Individual	N.A.
2. CA2: Quiz	4 - 5	A, C, F, G, H	20%	Individual	N.A.
3. Final Examination	1 - 6	A-H, L	60%	Individual	N.A.
<b>Total</b>			<b>100%</b>		

#### 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.

**Learning & Teaching Approach**

<b>Approach</b>	<b>How does this approach support students in achieving the learning outcomes?</b>
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).

## Readings & References

*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 (5<sup>th</sup> Edition), Pearson

## Course Policy & Student Responsibility

### (1) 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.

### (2) 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.

## 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 recognise 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 about the definitions of any of these terms, you should refer to the [Academic Integrity at NTU \(sharepoint.com\)](#) for more information. Consult your instructor(s) if you need any clarification about the requirements of academic integrity in the course.

## Course Instructors

Instructor	Office	Phone	Email
Dr Kelvin Pang	N1-01c-74	6790 5316	kelvin.pangkl@ntu.sg
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Asst Prof Yan Ran	N1-01c-81	6790 5331	yan.ran@ntu.edu.sg

## Planned Weekly Schedule

<b>Week</b>	<b>Topic</b>	<b>Course LO</b>	<b>Readings/ Activities</b>
1-2	Introduction to supply chain management	1	Tutorial and lectures
3	Key logistics activities and total cost concept	1	Tutorial and lectures
4	Logistics services of shipping companies	3	Tutorial and lectures
5	Just-in-time concept and practices	3	Tutorial and lectures
6	Achieving strategic fit in shipping logistics and its supply chain drivers	2	Tutorial and lectures
7	Introduction of operations management in logistics processes	2	Tutorial and lectures
8	Customer services in shipping logistics	3	Tutorial and lectures
9	Scheduling in supply chain management	5	Tutorial and lectures
10	Cycle inventory (EOQ)	4	Tutorial and lectures
11	Quantity discount & supply chain coordination	4	Tutorial and lectures
12	Bullwhip effect	5	Tutorial and lectures
13	Revenue management in supply chain	6	Tutorial and lectures