

MT3004 SHIPPING MANAGEMENT

Academic Year	2024-25	Semester	1
Course Coordinator	Capt KH Tan		
Course Type	Core		
Pre-requisites	Nil		
AU	3		
Grading	Letter Grading		
Contact Hours	39 (26 hours Lecture & 13 hours Tutorial)		
Proposal Date	20 February 2023		

Course Aims

This course introduces the framework and practices on various aspects of shipping management, along with insights into related parameters. The tools for financial analysis of shipping investments are also introduced.

Intended Learning Outcomes (ILO)

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

1. Understand the functions and activities of different aspects to shipping management
2. Know the concepts, functions, and strategies of shipping businesses
3. Conceptualize on technical management of a ship, including dry docking
4. Have a good perspective into safety and security management in ship operations
5. Reflect and evaluate risks, setting performance indices in managing shipping activities
6. Understand financial resources and related analysis tools.

Course Content

No	Topic	Lecture Hrs	Tutorial Hrs
1	Introduction to ship management: functions and activities	2	1
2	Roles of Ship Managers	2	1
3	Technical support to ship management	2	1
4	Crewing functions in ship management	2	1
5	Aspects of commercial management in shipping	2	1
6	Safety and Security in shipping / Safety management systems	2	1
7	Maritime energy management	2	1
8	Contractual matters in shipping management	2	1
9	Assessing risks and measuring Performances	2	1
10	Insights into tanker management	2	1
11	Organizational behaviours in shipping	2	1
12	Managing financial resources, Capital budgeting	2	1
13	Sustainability in shipping	2	1
Total:		26	13

Assessment (Includes both continuous and summative assessment)

Component	ILO Tested	PLO Attributes	Weightage	Team / Individual	Rubrics
1. CA1: Quiz 1	1,2,3,4	A,B,C,D,F	20%	Individual	N.A.
2. CA2: Quiz 2	2,5,6	B,D,E	20%	Individual	N.A.
3. Final Examination	1 to 6	A to E,G,I	60%	Individual	N.A.
Total			100%		

Programme Learning Outcomes (PLO)

✓ **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. Draft 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 on an individual report writing and a final exam. The individual report writing requires submission of a written report. Feedbacks for the report will be provided upon the completion of marking and grading where grades will also be informed.

Learning & Teaching Approach

Approach	How does this approach support students 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).

Readings & References

1. Ship Management - Theory and Practice (2021), by Pengfei Zhang & Lijun Tang
2. Ship Operations Management (2018), WMU, by I.D. Visvikis & P.M. Panayides
3. Ship Operations and Management (2022), ICS, by Patrick Neylan

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 Handbook](#) 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
Capt KH Tan	NTU CEE	81865322	Kh_tan@ntu.edu.sg

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
1	Introduction to ship management: functions and activities <ul style="list-style-type: none"> - The state holders, ship owning entities, venues of managing ships - Shipping company structures 	1,2	Lecture and Tutorial
2	Roles of Ship Managers, in-house and 3 rd party <ul style="list-style-type: none"> - Liabilities and responsibilities - Areas of contribution to a success 	1,2	Lecture and Tutorial
3	Technical support to ship management <ul style="list-style-type: none"> - Regulatory aspects - Repair and maintenance, budgeting, spares etc. 	1,2,3	Lecture and Tutorial
4.	Crewing functions in ship management <ul style="list-style-type: none"> - The human element, health and well being - Regulatory and welfare, MLC - Fatigue management, STCW 	1,2	Lecture and Tutorial
5	Aspects of commercial management in shipping <ul style="list-style-type: none"> - Acting in owners' interest re: voyage instructions - Charter party compliance 	1,2	Lecture and Tutorial
6	Safety and Security in shipping / Safety management	1,2,3,4	Lecture and

	<p>systems</p> <ul style="list-style-type: none"> - Regulatory aspects, ISM, ISPS etc. - Preventive measures against piracy, hijack etc. 		Tutorial
7	<p>Maritime energy management</p> <ul style="list-style-type: none"> - Pollution prevention in shipping - Energy renewal / environment impacts - Understanding fundamentals of energy efficiency 	1,3	Lecture and Tutorial
8	<p>Contractual matters in shipping management</p> <ul style="list-style-type: none"> - Relationship between owners n managers - BIMCO contracts -SHIPMAN 2009 & CREWMAN A 	1,2	Lecture and Tutorial
9	<p>Assessing risks and measuring Performances</p> <ul style="list-style-type: none"> - Risk assessments to ensure safe operations - KPI (Various performance - Business, Safety, etc.) - Industry Benchmarking 	1,2,4,5	Lecture and Tutorial
10	<p>Insights into tanker management</p> <ul style="list-style-type: none"> - Features in tanker management as differing - Self-Assessments (TMSA), SIRE regime 	1,2	Lecture and Tutorial
11	<p>Organizational behaviours in shipping</p> <ul style="list-style-type: none"> - Structures and cultures - Management of Change 	1,2,3	Lecture and Tutorial
12	<p>Managing financial resources, Capital budgeting</p> <ul style="list-style-type: none"> - Discounted cash flow analysis - Bank financing, Weighted average cost of capital 	1,2,5,6	Lecture and Tutorial
13	<p>Sustainability in shipping</p> <ul style="list-style-type: none"> - Environmental management system (EMS) - ISO 14001, Corporate social responsibility 	1,2,3,6	Lecture and Tutorial