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

## **Course Overview**

Expected Implementation in Academic Year	AY 2025-26
Semester/Trimester/Oth ers (specify approx. Start/End date)	Semester 2
Course Author * Faculty proposing/revising the course	Chiu Sai Hoi, Benson
Course Author Email	BensonChiu@ntu.edu.sg
Course Title	Capstone Project in Maritime Studies
Course Code	MT4008
Academic Units	5
Contact Hours	64
Research Experience Components	Research Defined Course (at least 50% of deliverables involve practical research activities: problem identification, hypothesis forming, data collection/analysis/interpretation, result communication)

## Course Requisites (if applicable)

Pre-requisites	Year 4 Standing
Co-requisites	
Pre-requisite to	
Mutually exclusive to	
Replacement course to	
Remarks (if any)	

## **Course Aims**

The objective of this course is to provide students an opportunity to apply the knowledge acquired in their undergraduate study to deal with real-world business problems.

Students taking this capstone research project would have to work as a team to draw on their broadened awareness of various business aspects in the shipping and logistics business context, e.g. shipping economics, ship chartering, shipping management, maritime law, marine insurance, just to name a few, to analyse real-world scenarios. The capstone research project topic could be discussed and finalized with or without industrial sponsor.

The aims of studying this course are to develop students' global outlook through literature research on relevant materials and information, applications of knowledge acquired, and at the same time to build teamwork and leadership skills throughout the project. The course would also help students to recognize their inner entrepreneurial potential and nurture them with the desired attributes including but not limited to critical thinking and problem-solving skills, creativity and innovative mindset.

## **Course's Intended Learning Outcomes (ILOs)**

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

ILO 1	Integrate and apply ideas, concepts, theories, practical real-life examples learnt in various courses in the Maritime Studies programme.
ILO 2	Identify critical tasks in the process of conception of design to completion of the capstone project.
ILO 3	Conduct and strategize an independent research investigation and provide practical solutions to the maritime industry.
ILO 4	Comprehend the importance of risk assessment and mitigation and discuss the need to insure against that for a new business opportunity.
ILO 5	Interpret and identify relevant legal framework and case law applicable to various shipping scenarios.
ILO 6	Understand the relations between the main financial reporting elements, e.g. cash flow, profit and loss statement, etc.
ILO 7	Compile and write an integrative report and present relevant findings openly.
ILO 8	Develop oral communication skills through discussions with peers in the team, instructors and/or industrial players.
ILO 9	Collaborate and work effectively with peers in a team to carry out the capstone project.

### **Course Content**

This is a project-based course in which students are required to undertake a group project or an interactive business case study covering both the conceptual and detailed aspects of planning, design and execution elements. The project could involve different business and/ or technical disciplines in the shipping and logistics industries, such as shipping economics, ship chartering, project management, shipping management, maritime law, marine insurance, maritime technology, port operations, shipping logistics, etc.

## Reading and References (if applicable)

There will be no specific recommended textbook but Supervisors will advise the relevant reference materials for respective project.

# **Planned Schedule**

Week or Session	Topics or Themes	ILO	Readings	Delivery Mode	Activities
1	Course overview and project briefing	1	Lecture Materials: understand the project requirements	In-person	Lecture & Tutorial
2	Project formation	1, 2, 3	Lecture Materials: guidance on team formation, and identification of business plan and project tasks list	In-person	Lecture & Tutorial
3	Strategic and scenario planning	1, 2, 3, 4, 5, 6	Lecture Materials: guidance on concepts and applications on strategic and scenario planning practices related to the project or business case study	In-person	Lecture & Tutorial
4	Strategic and scenario planning	1, 2, 3, 4, 5, 6	Lecture Materials: guidance on concepts and applications on strategic and scenario planning practices related to the project or business case study	In-person	Lecture & Tutorial
5	Industry perspective and sharing + project consultation	1, 2, 3, 4, 5, 6	Lecture Materials: industrial sharing, and consultation with project instructor and/or industrial player for the execution of project or business case study	In-person	Lecture & Tutorial
6	Industry perspective and sharing + project consultation	1, 2, 3, 4, 5, 6	Lecture Materials: industrial sharing, and consultation with project instructor and/or industrial player for the execution of project or business case study	In-person	Lecture & Tutorial
7	Project consultation and execution	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Consultation with project instructor and/ or industrial player. Execution of project or business case study
8	Project consultation and execution	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Consultation with project instructor and/ or industrial player. Execution of project or business case study

Week or Session	Topics or Themes	ILO	Readings	Delivery Mode	Activities
9	Project consultation and execution	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Consultation with project instructor and/ or industrial player. Execution of project or business case study
10	Project consultation and execution	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Consultation with project instructor and/ or industrial player. Execution of project or business case study
11	Project consultation and execution	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Consultation with project instructor and/ or industrial player. Execution of project or business case study
12	Oral presentation and final report	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Oral presentation and final report submission
13	Oral presentation and final report	1, 2, 3, 4, 5, 6, 7, 8, 9	n/a	In-person	Oral presentation and final report submission

# Learning and Teaching Approach

Approach	How does this approach support you in achieving the learning outcomes?
Lectures	Formal lectures on concepts, principles or theories, as well as the application to the essentials in various aspects of the maritime trade practices related to the project or business case study would be conducted.  Contents are supported with numerous industry examples to assist with your understanding and application of this course.
Group Project Design	You will learn to work as a team to complete the design project reports which require self-study and research as well as teamwork beyond the lecture materials.  You will also have the opportunity to consult with panel instructors and/or industrial players to clarify on the concepts and applications taught during lectures and guidance in completing the project or business case study.

No.	Component		Related PLO or Accreditation		Description of Assessment Component	Team/Individual	Rubrics	Level of Understanding
1	Continuous Assessment (CA): Project(Project business plan and tasks list)	1, 2, 3	a, b, c, d, e	15	Each group will need to submit a report, please refer to the criteria listed in appendix 1. Weightage * Modification Factor	Team	Holistic	Extended Abstract
2	Continuous Assessment (CA): Project(Progress and status update)	1, 2, 3, 4, 5, 6	a, b, c, d, e, f, g, h, i, j, k	15	Interim update of project status, please refer to the criteria listed in appendix 1. Weightage * Modification Factor	Team	Holistic	Extended Abstract
3	Continuous Assessment (CA): Project(Final report)	1, 2, 3, 4, 5, 6, 7, 8,	a, b, c, d, e, f, g, h, i, j, k	40	Each group will need to submit a final report, please refer to the criteria listed in appendix 2 Weightage * Modification Factor	Team	Holistic	Extended Abstract
4	Continuous Assessment (CA): Presentation(Oral presentation)	7, 8, 9	h, i, j, k	30	Every team will need to do a presentation with questions & answer session, please refer to the criteria listed in appendix 3	Individual	Holistic	Extended Abstract

#### Description of Assessment Components (if applicable)

\* The assessment for this course is heavily reliant on you working closely as a team to complete the capstone project. In order to account for your Individual Contribution to the team, the Modification Factor (MF) will be applied to CA1 to CA3. The MF is derived from panel judges' feedback, discussion sessions and peer assessment. For more details on the MF calculation, please see Appendix 4.

#### Formative Feedback

Students are expected to discuss and review with instructors/ industrial players and feedback on the progress and status of the capstone project.

You are encouraged to meet instructors/industrial players to seek feedback on your project or business case study through regular consultation sessions.

## NTU Graduate Attributes/Competency Mapping

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

Attributes/Competency	Level
Collaboration	Intermediate
Communication	Intermediate
Problem Solving	Intermediate
Embrace Challenge	Intermediate

## **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 Al 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)

You are expected to complete all scheduled project assignments and reports by due dates.

#### Policy (Absenteeism)

You are expected to participate in all group project discussions and activities as group work requires each member to contribute to teamwork. 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.

#### Policy (Others, if applicable)

A peer assessment will be conducted at the end of the course where you will have a chance to evaluate your peers to ensure that every team member contributes to the success of the capstone project. Your evaluation will not be known to the other team members, and we encourage your honesty in evaluating your peers.

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Last Updated By: YANG En-Hua

## **MT4008 Capstone Project in Maritime Studies**

## Appendix 1

CA1: Project Business Plan and Task List (15% x MF) CA2: Project and Status Update (15% x MF)

	Performance Level / Criteria							
Component	Outstanding (80-100%)	Good (60-79%)	Average, Meet Expectation (40-59%)	Below Expectations (0-39%)				
Drafting of Project Plan (5%)	Contents are relevant, precise and concise. Able to draft clear and reasonable research plan with all relevant details to achieve goals without much help from instructor. Comprehensive	Contents are comprehensive and relevant. Able to draft reasonable research plan with proper background knowledge and with minimal supervision. Majority of main	Contents are relevant. Able to draft research plan to achieve goals with help from instructor.	Contents are not sufficient or not meaningful. Unable to plan activities to complete tasks, even after instructor's feedback.				
Tasks List & Relevancy to Industrial Practice (10%)	tasks identified. Able to extend ideas or expand on suggestions beyond expectation. Good relevancy to industrial practice and able to provide insight to industry.	key tasks identified. Able to extend ideas or expand on suggestions with good understanding. Good relevancy to industrial practice.	identified. Able to partially extend ideas or expand on suggestions with basic understanding. Certain relevancy to industrial practice.	tasks. Unable to extend ideas or expand on suggestions, even after instructor's feedback. No relevancy to industrial practice.				
Drafting of Progress and Status Update (10%)	Well written contents with all relevant details and is completed on time.	Able to complete the progress and status update on time, with good contents, understandings, and logic.	Able to complete the progress and status update on time, but lacking in certain contents, understandings, and logic.	Unable to complete the progress and status update on time, even after instructor's feedback.				
General Initiative on the Project (5%)	Highly motivated and able to take good initiative to gain new knowledge and acquire skills related to the project.	Able to take good initiative to achieve the goals and scope of the project for most of the project duration.	Taking some initiative to meet the goals and scope of the project.	Poor initiative, relying on instructor, even after instructor's feedback.				

Appendix 2

CA3: Assessment Criteria for Final Report (40% x MF)

	Performance Level / Criteria						
Component	Outstanding (80-100%)	Good (60-79%)	Average, Meet Expectation (40-59%)	Below Expectations (0-39%)			
Report's Presentation - English, Spelling, Punctuation & Report Style and Layout (6%)	No typing and grammatical errors of any kind. Layout and format of report consistent, well organized and written. Sketches, figures, tables are clear, relevant and of good quality.	No typing and grammatical errors of any kind. Layout and format of report consistent. Sketches, figures, tables are informative and of good quality.	Some typing and grammatical errors. Layout and format of report consistent. Sketches, figures, tables of acceptable quality.	Many typing and grammatical errors with poorly constructed sentences. Layout and format of report not consistent. Sketches, figures, tables not clear or irrelevant.			
Report's Content - Ability to Understand Problems and Limitations (8%)	Excellent and logical in-depth understanding and analysis with new factors and ideas being proposed for possible new knowledge.	Good understanding and most factors are logically analyzed and further discussed.	Adequate understanding and analysis with some factors are considered.	Poor understanding and analysis of the subject matter. Not all factors are considered.			
Report's Content - Ability to Acquire Relevant Data and Information (8%)	High quality additional data acquired. Information and literature reviewed reflected student's deep understanding of the topic.	Additional and relevant data acquired. Good understanding of the information and literature review.	Relevant data acquired. Adequate information and literature reviewed, but lacking in thorough understanding and logic.	No relevant data acquired. Poor information and literature reviewed even after instructor's feedback.			
Report's Content  - Ability to Interpret Data & Analyze and Discuss Results (13%)	All accurate interpretation and relevant results. High quality discussion with identification of limitations and constructive suggestions for future work.	All accurate interpretation and relevant results. Good discussion with suggestions for future work.	Mostly accurate interpretation and relevant results. Adequate discussion but lacking in thorough understanding and logic.	Poor interpretation and irrelevant results. Outcomes are oversimplified with poor discussion.			

Report's	Excellent and	Good	Relevant	No
Content	logical in-depth	recommendations	recommendations	recommendation
_	recommendations	and conclusions	and conclusions	and conclusion
Ability to	and conclusions	drawn.	drawn.	drawn.
Draw	drawn.	Good references	Adequate	Few and not up-
Recommend	Excellent use and	listed and cited in	references listed	to-date
ations and	citation of	literature review	and cited in	references
Conclusions	references	and report.	literature review	listed.
&	throughout the		and report.	Lacking citation
Use of	report.			in literature
References				review.
(5%)				

# Appendix 3 CA4: Assessment Criteria for Oral Presentation (30%)

		Performance Level / Criteria							
Component	Outstanding (80- 100%)	Good (60-79%)	Average, Meet Expectation (40-59%)	Below Expectations (0-39%)					
Contents, Organization and Q&A (20%)	Excellent and logical in-depth contents with detailed explanation and refreshing slide design. Able to understand and answer all questions.	Good contents with detailed explanation and substantial effort in slide design. Able to understand and answer most questions.	Adequate contents with reasonable depth of explanation and average slide design. Able to understand and answer some questions.	Poor contents and presentation without clear focus and poor slide design. Unable to understand and answer questions.					
Teamwork (10%)	Excellent teamwork effort and all members contributed to the presentation. Contents are reasonably coordinated.	Good teamwork effort and all members contributed to the presentation.	Average teamwork effort and most members contributed to the presentation.	Poor teamwork effort and some members did not contribute to the presentation.					

## Appendix 4

#### **Criteria for Peer Assessment**

	Performance Level / Criteria			
Component (Equal Weightage for all components)	Outstanding (4)	Good (3)	Average, Meet Expectation (2)	Below Expectations (1)
Collaborative Behavior	Cooperative and always delivered assigned tasks on time. Take initiative to help other to ensure success of team project.	Cooperative and always delivered assigned tasks on time. Willing to assist others upon request.	Stop short at delivering assigned tasks, sometimes after reminder(s).	Uncooperative, non-committed, always miss deadlines.
Quality of Works	Quality of works higher than overall group quality, or go extra miles to assist teammate to enhance the quality of group works.	Good quality of deliverables under individual responsibility.	Acceptable quality of deliverables under individual responsibility.	Quality of works not acceptable.
Ideas and Participations	Active participation and initiatives, good ideas and suggestions in enhancing the quality of group works.	Contributed suggestions and ideas to enhance the quality of group works.	Somewhat contributed in enhancing the quality of group works.	Did not participate in group works.

Average Peer Assessment Score	MF	
3.51 to 4.00	1.05	
2.76 to 3.50	1.00	
2.51 to 2.75	0.95	
2.00 – 2.50	0.9	
Below 2.0	Separate Assessment	

Peer assessment exercise will be anonymous and done towards the end of the semester.

For student who has average peer assessment score below 2.0, Course coordinator might contact/call up the student as well as the Project Manager, and/or contact any other team member(s) to further assess the appropriate MF.

In addition to peer assessment, MF might be moderated by course coordinator and panel judges from the interaction during consultation, minutes of meeting, feedbacks from PM and other team members.