

COURSE OUTLINE

(1) GENERAL

SCHOOL	OF BUSINESS STUDIES		
ACADEMIC UNIT	SHIPPING, TRADE AND TRANSPORT DEPARTMENT		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	NA0010	SEMESTER	3 rd
COURSE TITLE	Maritime Technology		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS
		3	5
COURSE TYPE	SUBJECT AREA COURSE - COMPULSORY		
PREREQUISITE COURSES:	N/A		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)	https://eclass.aegean.gr/courses/TNEY188/		

(2) LEARNING OUTCOMES

Learning outcomes
<p>The Maritime Technology course analyzes techno-economic data on ship types and the corresponding parameters affecting the management and economic exploitation of ships.</p> <p>It aims to bring the students into contact with the shipping environment of the operation and management of ships and to familiarize them with the basic elements of the structure of the ship, the types of ships, the functional and construction particularities of ships at the introductory level. The course emphasizes the fundamental concepts of shipping, the technology applied to them, the machinery and the systems installed in it according to the type of ship, the type of cargo they carry, as well as the practical application of the existing technologies. Modules such as structure, nomenclatures and ship terminology, input-output analysis, risk and security, international maritime activity, operating costs of ships are examined.</p> <p>The learning outcomes of the course are summarized in:</p> <ul style="list-style-type: none"> - Understanding of the basic principles of ship construction, as well as basic features and geometrical characteristics of the ship - Structure and terminology related to the ship as well as stability and durability of ships - Financial engineering features of ship management - Implementation of best practices in the operation of the ship and its relationship

with the shipping company

- Propulsion & Basic Machinery Machines
- Diagnosis of causes of malfunction and assessment of optimization of ship functionality
- Operating the ship's cost and calculating basic costs in relation to the type of ships
- Modern technological, operational and management systems

General Competences

- Search, analyze and synthesize data and information, using the necessary technologies
- Adapt to new situations
- Decision making
- Respect for the environment through the development of processes
- Autonomous work
- Teamwork
- Working in an international environment
- Working in an interdisciplinary environment
- Production of new research ideas.

(3) SYLLABUS

The content of the course develops the basic principles of ship structure, operation and management at a theoretical and applied level. In this context, the course aims to develop students' knowledge and skills to:

1. Understand the basic techno-economic differences of the basic types of ships
2. Be able to assess the parameters specific to commercial ship management.
3. To enhance the level of perception of learners on issues they examine and describe the complexity of the techno-economic parameters existing in the shipping sector

Learning outcomes sought

1. To acquire basic knowledge about the specificities of ships as their transport systems, their operation and their functionality, so that they can be used in later lessons of the school.

The content of the course includes:

- Fundamental Principles and basic traits as well as geometric characteristics of ships
- Structure and terminology related to the ship
- Propulsion & Key Engine Machinery
- The cost of operating the ship and calculating basic costs in relation to the type of ships
- Modern technological, operational and management systems
- Green shipping and ship technologies

- Maritime industry and new technologies
- Case studies

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY:	Face-to-face, physical presence in class and implementation of e-class platform	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of ICT in teaching, laboratory education, communication with students, based on synchronous and interactive technologies	
TEACHING METHODS	<i>Activity</i>	<i>Semester workload</i>
	Lectures	39 hours
	Case studies	14 hours
	View educational documentaries – educational visits	19 hours
	Teamwork Presentations	14 hours
	Course preparation	26 hours
	Meetings to resolve questions	10 hours
	Course exam final	3 hours
	Course total	125 hours
STUDENT PERFORMANCE EVALUATION	<p>Student evaluation procedures and final course grading are based on the weighted combination of:</p> <ul style="list-style-type: none"> - written exam: (100%) <p>Language of student evaluation: Greek with specialized terminology in English.</p>	

(5) ATTACHED BIBLIOGRAPHY

- Suggested bibliography:
- Notes of instructor
- Auxiliary machinery for ships, Eugenides Foundation, 2015
- Related academic journals: