

COURSE OUTLINE

(1) GENERAL

SCHOOL	Business Administration Sciences		
ACADEMIC UNIT	Department of Shipping, Trade and Transport		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE		SEMESTER	3 rd
COURSE TITLE	Operations Management of Ports and Terminals		
INDEPENDENT TEACHING ACTIVITIES <i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>		WEEKLY TEACHING HOURS	CREDITS
		3	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE <i>general background, special background, specialised general knowledge, skills development</i>	Special background		
PREREQUISITE COURSES:	No		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS			
COURSE WEBSITE (URL)			

(2) LEARNING OUTCOMES

<p>Learning outcomes <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i></p> <p><i>Consult Appendix A</i></p> <ul style="list-style-type: none"> • <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> • <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> • <i>Guidelines for writing Learning Outcomes</i>
<p>After the end of the course students will be able to:</p> <ul style="list-style-type: none"> - Understand the way a port and an inland or port container terminal operates - Identify the main operations of port terminals, the most important types of ports and how they can be managed. - Introduction to the main methods of demand calculation for port services. - Exercises on optimization, linear regression and choice models. - Introduction to the challenges faced by the port industry and roadmap to the transition to Port 4.0
<p>General Competences <i>Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?</i></p> <p><i>Search for, analysis and synthesis of data and information, with the use of the necessary technology</i> <i>Project planning and management</i> <i>Adapting to new situations</i> <i>Respect for difference and multiculturalism</i> <i>Respect for the natural environment</i></p>

<i>Decision-making</i> <i>Working independently</i> <i>Team work</i> <i>Working in an international environment</i> <i>Working in an interdisciplinary environment</i> <i>Production of new research ideas</i>	<i>Showing social, professional and ethical responsibility and sensitivity to gender issues</i> <i>Criticism and self-criticism</i> <i>Production of free, creative and inductive thinking</i> <i>.....</i> <i>Others...</i> <i>.....</i>
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Search for, analysis and synthesis of data and information, with the use of the necessary technology
Project planning and management
Critical analysis of existing material
Working independently
Decision making

(3) SYLLABUS

Lecture 1 – Introduction

- Introduction, Description of coursework exams and grades.
- Aim of the course
- Introduction to ports- what is a port- type of ports
- Why do we study port management
- Relationship between port and the city
- The port business product

Lecture 2 – Port operations management and design

- Basic rules of port design
- Stages of port design and port operations management
- Decision making in ports
- Information in ports- Information exchange and management system
- Port choice models

Lecture 3 – Workshop on methods

- Optimisation exercises
- Choice models
- Linear Regressions

Lecture 4 Operations and demand in port container terminals

- Parts, systems, equipment and services in port container terminals.
- Calculation of dimensions for different container terminals
- Calculation of demand for port container terminals
- Calculation of dwell time in port container terminals

Lecture 5 – Optimisation and planning of port container terminal services

- Stacking alternatives, stacking dimensions and equipments in port container terminals.
- Beth allocation problem (static and dynamic)
- Operations optimization

Lecture 6 – Ports 4.0 – Next generation of ports and logistics chains

- Physical Internet
- Ports of the future
- Green ports
- New Technologies in ports

Lecture 7 – Exams

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(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face-to-face, Distance learning	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Quizzes, online games, workshop	
TEACHING METHODS <i>The manner and methods of teaching are described in detail. Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc. The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<i>Activity</i>	<i>Semester workload</i>
	Interactive teaching with quizzes	4 hours
	Study and analysis of bibliography	21 hours
	Lectures	21 hours
	Project	10 hours
	Course total	56 hours
STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i>	Multiple choice exam 80% grade Project report 20% grade	

(5) ATTACHED BIBLIOGRAPHY

<p>- <i>Suggested bibliography:</i></p> <ul style="list-style-type: none"> - K. Χλωμούδης. Τάσεις και εξελίξεις στην λιμενική βιομηχανία. Εκδόσεις Παπαζήση, 2011 - Jurgen Bose. Handbook of terminal planning. Springer Science & Business Media, LCC 2011 <p>- <i>Related academic journals:</i></p> <ol style="list-style-type: none"> a. Maritime Policy and Management b. Maritime Economics and Logistics c. Research in Transportation and Business Management d. International Journal of Shipping and Transport Logistics e. Transportation Research Part E
