COURSE OUTLINE

(1) GENERAL

SCHOOL	Maritime and Industrial Studies		
ACADEMIC UNIT	Maritime studies		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE		SEMESTER	C
COURSE TITLE	Management of Port and Terminal Operations		

INDEPENDENT TEACHING ACTIVITIES *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*	WEEKLY TEACHING HOURS	CREDITS
	3	5
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).		

COURSE TYPE *general background, special background, specialised general knowledge, skills development*	General Knowledge
PREREQUISITE COURSES:	-
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek
IS THE COURSE OFFERED TO ERASMUS STUDENTS	No
COURSE WEBSITE (URL)	https: //eclass.unipi.gr/

(2) LEARNING OUTCOMES

Learning outcomes

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.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

The course is an introduction to operations, management, service delivery processes and performance measurement of ports and terminals. The approach includes detailed coverage of the various types of terminals. In addition, the latest developments in the use of optimized management techniques, and modern equipment, as well as port and terminal support information systems are presented. At a theoretical level, the basic parameters of planning and management of port and terminal facilities, methods of calculating service demand, basic parameters and operations optimization are examined. A systematic review of recent literature on issues related to the developments in the field of ports and terminal infrastructures at a global and regional level, as well as an analysis of their effects both at national and organization level is included.

General Competences

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?

Search for, analysis and synthesis of data and information, with the use of the necessary technology	*Project planning and management*
Adapting to new situations	*Respect for difference and multiculturalism*
	Respect for the natural environment

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

(3) SYLLABUS

1. Trends in shipping and international trade. The external environment of ports
2. Organization and development of ports
3. Categories of ports and terminals
4. Port planning
5. Ports – layout and functions
6. International organizations involved in ports
7. Structure and functions of port management and terminal operations
8. Global Terminal Operators
9. Organizational systems of ports
10. Energy and environmental performance
11. Green ports
12. Port Automation

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	Face to face, in-class lecturing, Distance learning
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	- Using the Internet as a source of recent information and in identifying and understanding the trends and developments in the sector. - Using digital videos with significant visual messages that capture the terminal functions and operations - Using digital videos featuring expert interviews on topics of interest to the course - Encourage and support students to create their own videos as part of class assignments and presentations - Support of the learning process through the e-class platform
TEACHING METHODS *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*	

Activity	*Semester workload*
Lectures	24
Group Project with technical report and presentation	20
Case Studies	20
Independent Study	86
Course Total	150

STUDENT PERFORMANCE EVALUATION *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.*	• Written final exam (80%) that includes brief answers to questions assessing the knowledge, understanding, and critical thinking of the student (Oral examination where required - cases of certified learning difficulties requiring oral examination) • Team Project (20%) with written report submission, oral presentation and examination

(5) ATTACHED BIBLIOGRAPHY

Suggested bibliography:

- Lecture notes based on the following English bibliography
- Agerschou, Hans, "Planning and Design of Ports and Marine Terminals", Thomas Telford, 2004, 2nd Edition
- Jurgen Bose, Editor, Handbook of Terminal Planning. Springer Science & Business Media, LLC 2011
- Gunther, H. O., Kim, K. H. (eds), "Container Terminals and Automated Transport Systems: Logistics Control Issues and Quantitative Decision Support", 2004
- World Bank, Port Reform Toolkit, 2003
- Maria G. Burns, Port Management and Operations, CRC Press, Taylor & Francis Group, 2014, ISBN: 9781482206753.
- Khalid Bichou (2013) Port Operations, Planning and Logistics. Lloyd's Practical Shipping Guides. Informa law from Routledge-
- Lecture notes
- All the lecture notes and course related material are posted on the course support electronic platform, categorized by lecture and delivery module

- Additional Bibliography:
- Scientific articles including articles published by the instructor
- Manuals and reports of relevant research projects

- Related scientific magazines:
- Maritime Policy and Management
- Maritime Economics and Logistics
- Transportation Research Part B – Methodological
- Transportation Research Part E – Logistics and Transportation Review
- European Transport Research Review