

## Module Handbook Port and Terminal Management

Scheme & Program	M.Sc. Shipping Management		
Module Title	Port and Terminal Management		
Module Code			
Module Start Date / Cohort	2024-25		
Module Level	Level 7	Credit Rating	[5 ECTS credits]
Total study time	27 hours academic directed time 3 hours lecture per week	Hours of independent Learning and time for assessments	125 hours of teaching and independent learning and time for assessments
Module Leader & Lecturer:	Prof. Thanos Pallis		
Email:	<a href="mailto:apallis@unipi.gr">apallis@unipi.gr</a>		
Room:			
Office Hours:	Please email me for any queries or see me in sessions.		
Seminar Tutor(s):			
Program Director:	Professor Angelos Pantouvakis		
Administrator contact:	Mrs. Elvira Koutsouki, 2104142504		
Administrator e-mail:	<a href="mailto:shipman@unipi.gr">shipman@unipi.gr</a>		
Lecture day & time:	Tuesdays 18.00-21.00		
Seminar day & time:			

### 1. Welcome Note

Welcome to the Port and Terminal Management module of the University of Piraeus MSc in Shipping Management program. During the eight (8) weeks of this module, you will have the opportunity to learn and study the critical aspects of the organization and management practices of contemporary ports and the related maritime supply chains. Students specializing in shipping management have the opportunity to comprehend the role and the significance of seaports and their specialized terminals, as well as of the interlinked global maritime supply chains and logistics, which stand as key value-adding elements in the realization of maritime transportation; the globalized port service environment (global port and terminal operators); the emerging new business and port governance models; and the evolving relationships between the several stakeholders that are involved in the multifaced port services market.

### 2. Module aims

The course analyses the **contemporary port industry and how ports and their terminals are organized and managed to serve the global economy and regional and local development needs.** Using a

conceptual background supported by extensive fieldwork and empirical observations, such as analyzing flows, ports, and the strategies and policies articulating their dynamics, it aims to:

- Introduce the characteristics of the demand and supply of port services in an era of specialized shipping, continuous market adjustments, and port policy reforms.
- Familiarise students with the critical characteristics of ports and terminals for contemporary maritime transportation systems.
- Enable an understanding of market trends (supply and demand) using relevant theoretical concepts.
- Detail the economic principles of organization and management of ports and terminals—with an emphasis on issues of competition.
- Qualify participants to seek positions in ports, shipping, and other companies involved in seagoing trade and maritime transportation systems.

### **3. Learning Outcomes—what you will gain from taking the module:**

At the end of the course, participants will have a clear understanding of:

- The existing organisational structures of ports and terminals and the market and economic foundations that produce these structures.
- The changing port industry environment and the challenges for adaptation
- The potential worlds of production of port services.
- The evolution of ports as economic clusters, the activities developed as part of the cluster, and the prevailing management principles
- the determinants of the various forms of modern port and terminal competition, the implications for managerial practices of ports, terminals, shipping companies, and all those involved in maritime transportation and supply chains.
- the impacts of port governance changes, the increasing participation of the private sector, and the port policy parameters affecting the organisation of ports and terminals.

On completing the course, participants will be able to contribute to the shaping, implementation, and evaluation of port and terminal management forms.

### **4. Indicative Module Content:**

The purpose of the course is to generate knowledge on: the principles of modern port system organization and management and how the port industry has evolved in the context of the international environment and the changing trends in transport, trade and logistics, the parameters determining the organization of modern ports and the provision of port services, the principles and forms of port competition, the implications of port integration in supply chains, the structures of modern port governance, the formats of private and public sectors, and the measurements of port performance. It concludes with a review of key developments and the principles of management and governance of the Greek as well as the European port system. Theoretical concepts are linked with practical, real case examples, and when applicable, case exercises are part of the course material.

The syllabus includes the following thematic areas:

- (1) Introduction: Defining modern ports
- (2) Ports, terminals, services, and systems
- (3) Ports and terminals management
- (4) Determinants of port industry developments & the economic significance of ports and terminals
- (5) Demand & Supply of Port services – the role of changes in maritime transportation
- (6) The port as a multifaceted economic arena
- (7) Models of Port and port terminal organization/Port Services providers / Worlds of production of port services
- (8) Port Competition (intra-port; inter-port).
- (9) European Ports / The Greek Port System

**5. How the module is taught, attendance and the teaching schedule:**

The module will utilize theoretical lectures, presentation of case studies, scheduled presentations and thematic discussions with the participation of students and invited speakers. All lecture materials, including slides and selected readings, will be available through the University e-class system. Some sessions will include student presentations, based on the analysis of international literature.

Teaching activities are supported by regularly updated web-companions:

- Port Economics, Management and Policy: [www.porteconomicsmanagement.org](http://www.porteconomicsmanagement.org)
- PortEconomics: [www.porteconomics.eu](http://www.porteconomics.eu)

**Teaching Schedule per every one of the eight (8) weeks**

Lecture	Topic
<b>Lecture 1</b>	<p><b>Introduction to Port &amp; Terminal Management</b> (A multifaceted approach to the seaport &amp; its terminals)</p> <ul style="list-style-type: none"> <li>• What is a (modern port)?</li> <li>• Functions of a modern port</li> <li>• Port Generations</li> <li>• Changing economic environment</li> <li>• Greek Ports</li> <li>• Major Ports</li> </ul>
<b>Lecture 2</b>	<p><b>Key Changes in Demand</b></p> <ul style="list-style-type: none"> <li>• Ports &amp; Container Shipping <ul style="list-style-type: none"> <li>○ Increased Vessels Size</li> <li>○ Transshipment</li> <li>○ Alliances</li> <li>○ Vertical Integration</li> </ul> </li> <li>• Ports &amp; Maritime Supply Chains</li> <li>• Other drivers of change</li> </ul>
<b>Lecture 3</b>	<p><b>Contemporary Ports</b> Implications of the changing demand</p> <ul style="list-style-type: none"> <li>• Functions of a modern port</li> <li>• Port Generations</li> <li>• Specialization and Terminalisation</li> <li>• Competitiveness via landside operations, services and logistics</li> <li>• Port Hinterland, Regionalisation and Corridors (Inland Ports)</li> <li>• Competitiveness at Berth</li> <li>• Reorganisation of Services New Worlds of Production – Port Governance</li> </ul>
<b>Lecture 4</b>	<p><b>Terminals &amp; Terminal Operators</b></p> <ul style="list-style-type: none"> <li>• Reorganisation of Port Services Provision: Worlds of Production</li> <li>• Terminal Operators</li> <li>• Major Terminal Operators</li> <li>• Cooperation of Terminal Operators</li> <li>• Terminal Concessions and Land Leases</li> <li>• Financialisation of Port Terminal Operations</li> <li>• Risks and Terminal Investments</li> </ul>

<b>Lecture 5</b>	<p><b>Port Governance</b></p> <ul style="list-style-type: none"> <li>• Port Governance &amp; Reforms</li> <li>• Port Governance Models</li> <li>• Port Authorities (PAs)</li> <li>• Coordination - Cluster management</li> <li>• Port Planning and Development</li> <li>• Port Cooperation</li> <li>• Green Port Governance</li> <li>• European Port Governance</li> <li>• Port Marketing</li> </ul>
<b>Lecture 6</b>	<p><b>Port Competition</b></p> <ul style="list-style-type: none"> <li>• Forms of Port Competition</li> <li>• Intra-Port Competition</li> <li>• Inter-Port Competition</li> <li>• Intra-Terminal Competition</li> <li>•</li> </ul>
<b>Lecture 7</b>	<p><b>Port Performance</b></p> <ul style="list-style-type: none"> <li>• Port Performance Components</li> <li>• Performance measurements: International Initiatives</li> <li>• Efficiency</li> <li>• Effectiveness</li> <li>• Resiliency</li> <li>•</li> </ul>
<b>Lecture 8</b>	<p><b>Terminal (and Port) Development</b></p> <ul style="list-style-type: none"> <li>• <b>Capacity</b></li> <li>• <b>Latest trends</b> impacting the industry, such as supply chain management, automation, digitalization, and sustainability</li> <li>•</li> </ul>

## 6. Assessment

The module will be assessed based on two components:

A. Group project (40%): Students will work in groups of 2-4 on a topic of their choice, submitting a related report

B. A written final exam (60%) that includes essay development questions and / or multiple-choice questions and/or exercises to be solved.

Assessment Title and Brief Description	Word count/ Hours (where applicable)	Weight	Submission deadline	Submission method	Feedback date	How feedback is provided
Group project		40%	TBD	E-submission	TBD	-
Written exams	1 hour	60%	TBD	In class	TBD	

Any changes to the assessment schedule will be communicated by e-mail and/ or announcement via the e-class page of the module.

## 7. Recommended Reading

### Main reading:

- Lectures Presentations and related notes by the instructors (available via e-class)
- Notteboom, T. Pallis A. & Rodrigue J-P. (2022) Port Economics, Management and Policy – London: Routledge (web companion: <https://porteconomicsmanagement.org>)
- PortEconomics – a web-based initiative that provides freely accessible research, education, information, and network-building material on critical issues of port economics, management and policies. ([www.porteconomics.eu](http://www.porteconomics.eu))
- De Langen P.W. (2021). Towards a better port industry. London: Routledge.

### Related academic journals and specialised press \*:

- Selected articles from maritime transportation-related journals, such as Maritime Economics and Logistics; Maritime Policy and Management; International Journal of Shipping and Transport Logistics; Journal of Shipping and Trade; Research in Transportation Business and Management; Journal of Transport Geography; Transport Reviews; Transportation Research Policy and Practice, etc.
- Selected articles from the specialized press are usually published electronically: PortEconomics, Port Strategy, Port Technology International, Splash 24/7, Journal of Commerce, Loadstar.

\* A reading list will be provided following each lecture.

### Additional Material:

- Maria Burns, Port Management and Operations. CRC Press. 2015
- Patrick Alderton, Port Management and Operations, 3rd edition, 2008
- World Bank: Logistics Performance Index
- Pallis A. (2023; in Greek). Port Economy, Athens: Papazisis.

\*\*\*\*