

## COURSE OUTLINE GENERAL

<b>SCHOOL</b>	APPLIED ECONOMIC AND SOCIAL SCIENCES		
<b>ACADEMIC UNIT</b>	AGRIBUSINESS AND SUPPLY CHAIN MANAGEMENT		
<b>LEVEL OF STUDIES</b>	<i>Undergraduate</i>		
<b>COURSE CODE</b>	<b>5702</b>	<b>SEMESTER</b>	7th
<b>COURSE TITLE</b>	TRANSPORTATION AND DISTRIBUTION SYSTEMS		
<b>INDEPENDENT TEACHING ACTIVITIES</b>		<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>
Lectures		2	4
Laboratory exercises		2	
<b>COURSE TYPE</b>	Special Background		
<b>PREREQUISITE COURSES</b>	NO		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS</b>	Greek		
<b>IS THE COURSE OFFERED for ERASMUS STUDENTS?</b>	YES (in English)		
<b>COURSE WEBSITE (URL)</b>	<a href="https://oeclass.aua.gr/eclass/">https://oeclass.aua.gr/eclass/</a>		

### 1. LEARNING OUTCOMES

<b>Learning Outcomes</b>
<p>The aim of the course is to:</p> <ul style="list-style-type: none"> <li>● focus on the structure and organisation of distribution and transport systems, how they operate, the factors that determine demand for them, as well as the methods of qualitative and quantitative estimation of this demand.</li> <li>● delve into the design of distribution centres and the scheduling and routing of vehicles.</li> </ul> <p><b>Upon successful completion of the course, the student will be able to:</b></p> <ul style="list-style-type: none"> <li>● describe the types and characteristics of modes of transport, the role of intermodal transportation and transport infrastructure.</li> <li>● understand the role and contribution of new technologies, such as telematics, to transport and distribution.</li> <li>● analyse and evaluate the design and operation requirements of distribution centres.</li> <li>● support decisions concerning the transportation process.</li> <li>● compare supply chains to the dimension of the transportation work.</li> </ul>
<b>General Competences</b>
<ul style="list-style-type: none"> <li>● Search for, analysis and synthesis of data and information, with the use of the necessary technology</li> <li>● Adapting to new situations</li> <li>● Decision-making</li> <li>● Working independently</li> <li>● Teamwork</li> <li>● Working in an international environment</li> <li>● Project planning and management</li> <li>● Advance free, creative and causative thinking</li> </ul>

## 2. SYLLABUS

1. Introduction to basic concepts
2. Institutional and legal framework of operation
3. Analysis of the structure of the system and identification of required infrastructure
4. Modes of transportation and their characteristics (part A)
5. Modes of transportation and their characteristics (part B)
6. Terminals and combined transport
7. Use of new technologies
8. Factors and characteristics of demand
9. Demand forecasting methods and techniques in distribution and transport systems
10. Data processing and interpretation in distribution and transport networks
11. Optimization methods and techniques
12. Future trends
13. Special topics

A combination of teaching and learning methods will be used, aiming at the active participation of the students and the practical application of the thematic units under examination; there will also be lectures using audiovisual media, discussions, and analyses of case studies on real business issues, experiential (group) activities, as well as projections of relevant videos. Furthermore, articles, audiovisual lecture materials, web links/addresses, useful information, case studies and exercises for further practice are posted in digital form on the AUA Open e-Class platform.

## 3. TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b>	Face-to-face, Distance learning																			
<b>USE OF INFORMATION and COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>● Support of the learning process through the University's AUA Open eClass platform (integrated e-Course Management System)</li> <li>● Support of lectures using presentation software</li> <li>● Use of audiovisual material</li> <li>● Use of web applications</li> </ul> <p><b>Communication with students:</b> face to face at office hours, email, eclass platform</p>																			
<b>TEACHING METHODS</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><i>Activity</i></th> <th style="text-align: center;"><i>Workload</i></th> </tr> </thead> <tbody> <tr> <td>Lectures (direct)</td> <td style="text-align: center;">39</td> </tr> <tr> <td>Laboratory Practice</td> <td style="text-align: center;">26</td> </tr> <tr> <td>Essay Writing</td> <td style="text-align: center;">20</td> </tr> <tr> <td>Autonomous study</td> <td style="text-align: center;">36</td> </tr> <tr> <td>Advisory Support</td> <td style="text-align: center;">0,5</td> </tr> <tr> <td>Examination</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Laboratory Examination</td> <td style="text-align: center;">2</td> </tr> <tr> <td><i>Total (About 25 hours of study per ECTS)</i></td> <td style="text-align: center;"><b>125,5</b></td> </tr> </tbody> </table>		<i>Activity</i>	<i>Workload</i>	Lectures (direct)	39	Laboratory Practice	26	Essay Writing	20	Autonomous study	36	Advisory Support	0,5	Examination	2	Laboratory Examination	2	<i>Total (About 25 hours of study per ECTS)</i>	<b>125,5</b>
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<b>STUDENT PERFORMANCE EVALUATION</b>	<p>The evaluation process is in the language that the course is taught (Greek or English) and consists of:</p> <ol style="list-style-type: none"> <li>i. Compulsory written final examination at the end of the semester (weighting factor <b>70%</b> at</li> </ol>																			

	<p>least) which may include:</p> <ul style="list-style-type: none"> <li>● Multiple choice questionnaires</li> <li>● Open-ended questions</li> <li>● Problem solving</li> <li>● Oral examination</li> </ul> <p><b>Evaluation criteria:</b> correctness, completeness, clarity</p> <p>ii. Compulsory written exam during the semester (weighting factor 30%)</p> <p><b>Evaluation criteria:</b> correctness, completeness, clarity</p> <p><b>Special learning difficulties:</b></p> <p>Students with <b>special learning difficulties</b> in writing and reading (as they are certified and characterized by a competent body) are examined based on the procedure provided by the Department.</p> <p><b>Specifically-Defined Criteria:</b></p> <p>The evaluation criteria are made known during the first lesson and are clearly stated on the course website and the AUA Open e-class platform. The answers to the exam questions are posted on the AUA Open e-Class platform after the exam. The students are allowed to see their exam paper after its grading (during the announced office hours) and receive explanations about the grade they received.</p>
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#### 4. ATTACHED BIBLIOGRAPHY

##### ***Suggested Bibliography in Greek Language:***

- Jacobs, R. (2011). *Διοίκηση Λειτουργιών και Εφοδιαστικής Αλυσίδας*. Λευκωσία: Broken Hill.
- Sussman, J. (2003). *Εισαγωγή στα συστήματα μεταφορών*. Αθήνα: Σταμούλη.
- Γιαννάτος, Γ. & Ανδριανόπουλος, Σ. (1999). *Logistics Μεταφορές - Διανομή*. Αθήνα: Σέλκα - 4M.
- Σαμπράκος Ε.Α. (2009). *Ο τομέας των μεταφορών και οι συνδυασμένες εμπορευματικές μεταφορές*. Αθήνα: Σταμούλη.

##### ***Related academic Journals:***

- European Transport Research Review
- International Journal of Physical Distribution & Logistics Management
- Logistics & Sustainable Transport

##### ***Instructor's Notes***