

## COURSE OUTLINE: TRANSPORTATION ECONOMICS

### GENERAL

|                                                                                                                                                                                                                                                                       |                                                                 |                              |                      |
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| <b>SCHOOL</b>                                                                                                                                                                                                                                                         | ECONOMICS AND BUSINESS                                          |                              |                      |
| <b>ACADEMIC UNIT</b>                                                                                                                                                                                                                                                  | ECONOMICS                                                       |                              |                      |
| <b>LEVEL OF STUDIES</b>                                                                                                                                                                                                                                               | UNDERGRADUATE                                                   |                              |                      |
| <b>COURSE CODE</b>                                                                                                                                                                                                                                                    | <b>OA123</b>                                                    | <b>SEMESTER</b>              | <b>7th (Major A)</b> |
| <b>COURSE TITLE</b>                                                                                                                                                                                                                                                   | <b>TRANSPORTATION ECONOMICS</b>                                 |                              |                      |
| <b>INSTRUCTOR(S)</b>                                                                                                                                                                                                                                                  | <b>Professor T. Metaxas</b>                                     |                              |                      |
| <b>INDEPENDENT TEACHING ACTIVITIES</b><br><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> |                                                                 | <b>WEEKLY TEACHING HOURS</b> | <b>CREDITS</b>       |
|                                                                                                                                                                                                                                                                       |                                                                 | 3                            | 6                    |
| <i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>                                                                                                                                              |                                                                 |                              |                      |
| <b>COURSE TYPE</b><br><i>general background, special background, specialized general knowledge, skills development</i>                                                                                                                                                | SPECIAL BACKGROUND                                              |                              |                      |
| <b>PREREQUISITE COURSES:</b>                                                                                                                                                                                                                                          | NO                                                              |                              |                      |
| <b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>                                                                                                                                                                                                                      | GREEK                                                           |                              |                      |
| <b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>                                                                                                                                                                                                                      | YES                                                             |                              |                      |
| <b>COURSE WEBSITE (URL)</b>                                                                                                                                                                                                                                           | <a href="https://www.econ.uth.gr/">https://www.econ.uth.gr/</a> |                              |                      |

### 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*

Upon completion of the course students will be able to:

- Know issues of design and planning of development phases for a transport service
- Use primary and secondary data to investigate issues related to transport policy design or the development of a transport service
- Have a clear view of the importance of transport and its connection to spatial development
- Link and analyze spatial-scale data with the design and support of products and services across various transport modes
- Understand the process of evaluating transport infrastructures and projects
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**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*

*Adapting to new situations*

*Decision-making*

*Working independently*

*Team work*

*Working in an international environment*

*Working in an interdisciplinary environment*

*Production of new research ideas*

*Project planning and management*

*Respect for difference and multiculturalism*

*Respect for the natural environment*

*Showing social, professional and ethical responsibility and*

*sensitivity to gender issues*

*Criticism and self-criticism*

*Production of free, creative and inductive thinking*

*.....*

*Others...*

*.....*

**SYLLABUS**

The course aims to familiarize the student with ways of applying economic theory to the transport sector. Emphasis is placed on the importance of transport for spatial development and on the strategic planning of transport projects and transport services.

Specifically, the course covers the following units:

1. Introductory concepts: The concept of transport. Organization of the transport sector. Developments in the transport sector.
2. Demand and supply in transport markets: Key features of the demand curve for a transport service. Market equilibrium for a transport service. Factors affecting the demand for a transport service. Factors affecting the supply of a transport service. Methods for calculating price elasticity of demand for a transport service — pricing policy. Methods for calculating income elasticity of demand. Methods for calculating cross-elasticity of demand for transport services.
3. Demand forecasting models: For intercity transport, air transport, rail transport, and urban transport.

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| 4. Cost analysis: Construction and operating costs. Transport capacity and system load. Service lifetime. Operating costs. Transport costs in freight transport. Transport costs and firm location. Combined transport — cost structure. |
| 5. Commercial policy of transport firms: Objectives. Methods and practices. Promotion tools.                                                                                                                                             |
| 6. Case studies.                                                                                                                                                                                                                         |

#### TEACHING and LEARNING METHODS - EVALUATION

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| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                             | Face-to-face                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |
| <b>DELIVERY</b><br><i>Face-to-face, Distance learning, etc.</i>                                                                                                                                                                                                                                                                                                                                                                                                                             | Face-to-face                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |
| <b>TEACHING METHODS</b><br><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> | <b>Activity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Semester workload</b> |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Lectures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 39                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Study and analysis of bibliography                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | 93                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Essay writing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 40                       |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Meetings and examination of essay progress                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 6                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Exams                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 2                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Course total                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>180</b>               |
| <b>STUDENT PERFORMANCE EVALUATION</b><br><i>Description of the evaluation procedure</i><br><br><i>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</i>                                                                                                    | <p>The course final grade is determined as follows:</p> <ul style="list-style-type: none"> <li>a) Written examinations at the end of the semester — 60% of the final grade — in Greek; essay, analysis and critical thinking questions.</li> <li>b) Scientific research paper — 30% of the final grade. The paper should be 7,000–9,000 words, individual or 2–3 students, based primarily on international peer-reviewed literature.</li> <li>c) Progress meetings — 10% of the final grade.</li> </ul> <p>Progress meetings: 1st meeting</p> <ul style="list-style-type: none"> <li>• Structure of the paper</li> <li>• Core bibliography and articles</li> </ul> |                          |

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| <p><i>patient, art interpretation, other.</i></p> <p><i>Specifically-defined evaluation criteria are given, and if and where they are accessible to students.</i></p> | <ul style="list-style-type: none"> <li>• Guidance on questionnaire design (if relevant)</li> <li>• Division of tasks among team members</li> <li>• Guidance on finding scholarly work (journal publications &amp; working papers) in international databases</li> </ul> <p>2nd meeting</p> <ul style="list-style-type: none"> <li>• Submission of the first draft for comments and feedback</li> <li>• Evaluation of bibliography and articles</li> <li>• Identification of any problems</li> <li>• Recommendations (where appropriate)</li> </ul> <p>Erasmus students follow the same assessment methods, but instruction and assessment are conducted in English.</p> |
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#### **ATTACHED BIBLIOGRAPHY**

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| <ul style="list-style-type: none"> <li>- Προφυλλίδης Β. 2009 'Οικονομική των Μεταφορών', εκδόσεις Παπασωτηρίου, Αθήνα</li> <li>- Μουρμούρης Ι. 2006 'Οικονομική των Μεταφορών' εκδόσεις Σταμούλης, Αθήνα</li> </ul> <p>As additional bibliography, students are provided with a number of articles published mainly in English in international peer-reviewed journals, which they may use when preparing their papers.</p> <ul style="list-style-type: none"> <li>- Journal of Transportation A,B,C,D,E</li> <li>- Transportei</li> </ul> |
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