

## COURSE OUTLINE

### (1) GENERAL

<b>SCHOOL</b>	SCHOOL OF SOCIAL SCIENCES, HUMANITIES AND ARTS		
<b>ACADEMIC UNIT</b>	Department of International and European Studies		
<b>LEVEL OF STUDIES</b>	Post-graduate		
<b>COURSE CODE</b>	<b>SST102</b>	<b>SEMESTER</b>	B'
<b>COURSE TITLE</b>	Quantitative Methods in Shipping and Sea Transportation Economics		
<b>INDEPENDENT TEACHING ACTIVITIES</b>	<b>WEEKLY TEACHING HOURS</b>	<b>CREDITS</b>	
	3	7,5	
<b>COURSE TYPE</b>	COMPULSORY		
<b>PREREQUISITE COURSES:</b>	NO		
<b>LANGUAGE OF INSTRUCTION and EXAMINATIONS:</b>	ENGLISH		
<b>IS THE COURSE OFFERED TO ERASMUS STUDENTS</b>	NO		
<b>COURSE WEBSITE (URL)</b>	<a href="https://openeclass.uom.gr/courses/SST109/">https://openeclass.uom.gr/courses/SST109/</a>		

### (2) LEARNING OUTCOMES

<b>Learning outcomes</b>
This course covers essential concepts, tools and methods of statistics and econometrics. The main topics include descriptive and inferential statistics, as well as simple and multiple regression analysis, time series analysis, and forecasting methods. This course will emphasize on how these analytical tools can be applied in economic and financial data relating to the transportation and shipping industries.
<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>● Decision-making</li> <li>● Working independently</li> <li>● Team work</li> <li>● Production of free, creative and inductive thinking</li> </ul>

### (3) SYLLABUS

The course covers a variety of topics, such as: <ul style="list-style-type: none"> <li>● descriptive statistics,</li> <li>● modeling and hypothesis testing,</li> <li>● deterministic correlation methods,</li> <li>● simple and multiple linear regression models,</li> <li>● prediction models,</li> <li>● logit-probit models,</li> <li>● ARMA models,</li> <li>● data analysis with SPSS.</li> </ul>
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#### (4) TEACHING and LEARNING METHODS - EVALUATION

<b>DELIVERY</b> <i>Face-to-face, Distance learning, etc.</i>	Face to face	
<b>USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY</b>	<ul style="list-style-type: none"><li>• Use of the open eClass online platform</li><li>• Power points and other training materials</li><li>• Gretl, SPSS, Excel, email.</li></ul>	
<b>TEACHING METHODS</b>	<b><i>Activity</i></b>	<b><i>Semester workload</i></b>
	LECTURES	30
	AUTONOMOUS STUDY	180
	<b>TOTAL COURSE</b>	210
<b>STUDENT PERFORMANCE EVALUATION</b>	Take-home essays, in-class tests (all in English).	

#### (5) ATTACHED BIBLIOGRAPHY

<ul style="list-style-type: none"><li>• Analysis of Economic Data, Gary Koop, 2013, Wiley.</li><li>• Analysis of Financial Data, Gary Koop, 2006, Wiley.</li><li>• Introduction to Econometrics, James H. Stock, Mark W. Watson, 2008, Pearson/Addison-Wesley.</li></ul>
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