

<b>Course title</b>	Research Methods and Data Analysis
<b>Course code</b>	
<b>Type of course</b>	Compulsory
<b>Level of course</b>	Postgraduate
<b>Year of study</b>	First (1 <sup>st</sup> )
<b>Semester</b>	Second (2 <sup>nd</sup> )
<b>ECTS credits</b>	
<b>Name of lecturer(s)</b>	Assistant Professor Georgios Androulakis,
<b>Aim of the course</b>	The aim of this course is to present a series of modern quantitative techniques with which managers may formulate problems, analyze data and reach conclusions in order to make better decisions. These techniques include Non Parametric Statistics, Non Linear Regression and Principal Components Analysis for addressing realistic problems, defining scenarios and making better decisions.
<b>Learning outcomes</b>	At the end of this course the student should be able to: <ol style="list-style-type: none"> <li>1. Formulate statistical models</li> <li>2. Handle linear/nonlinear regression</li> <li>3. Analyze data with Principal Components Analysis.</li> </ol>
<b>Competences</b>	At the end of the course the student will have further developed the following skills/competences: <ol style="list-style-type: none"> <li>1. Evaluate Statistical models</li> <li>2. Reporting and presenting the results.</li> </ol>
<b>Prerequisites</b>	There are no prerequisite courses. It is, however, recommended that students have at least a basic knowledge of Differential and Integral Calculus.
<b>Course contents</b>	<ol style="list-style-type: none"> <li>1. Analysis of variance</li> <li>2. Linear/nonlinear regression</li> <li>3. Statistical Models</li> <li>4. Principal Components Analysis</li> </ol>
<b>Recommended reading</b>	<ol style="list-style-type: none"> <li>1. “Quantitative Methods for Business Decisions”, Jon Curwin and Roger Slater, International Thomson Business Press, 2007</li> </ol>

	<ol style="list-style-type: none"> <li>2. "Essential Quantitative Methods for Business, Management and Finance", L. Oakshott, Palgrave Macmillan, 2012</li> <li>3. "Quantitative Methods for Business &amp; Management", F. Dewhurst, Mc Graw Hill, 2006</li> <li>4. "Quantitative Methods for Decision Makers", M. Wisniewski, Prentice Hall, 2010</li> </ol>
<b>Teaching and learning methods</b>	Lectures – Tutorials – Laboratory sessions
<b>Assessment and grading methods</b>	The grade is calculated based on written exams and assignment given throughout the course. Greek grading scale: 1 to 10. Minimum passing grade: 5
<b>Language of instruction</b>	Greek.