Course Title	**Research Methods**				
Course Code	**DLITSM 506**				
Course Type	**Required**				
Level	**MSc (Level 2)**				
Year / Semester	**1st Year / 2nd Semester**				
Teacher's Name	**Dr Maria Avtzaki, Dr Panayiotis Paoulis**				
ECTS	**8**	**Lectures / week**	**2**	**Laboratories / week**	**NONE**
Course Purpose	The module aims at providing students with the knowledge of the essential tools and techniques necessary to understand the nature and concept of academic research, to develop a research question or hypothesis, to review the literature, to apply the appropriate research design in order to provide results and to write their research project. Students will acquire practical experience about effective research implementation processes, methods, and results dissemination. They will be presented with opportunities for developing their own research questions and methodological designs which will lead to the elaboration of their Masters Thesis Topic.				
Learning Outcomes	By the end of the course, the students should be able to: • Evaluate research questions and be able to draw from the educational research principles in order to develop research designs and methodologies suitable for investigating economic, shipping and legal issues; • Develop their own research questions and methodological designs, by implementing a small-scale research project related to their Master's Thesis; • Apply the mechanisms they can use for the effective communication of their research and academic results to the end users and the dissemination of the results to all interested parties, academic or not.				
Prerequisites	NONE	Co-requisites	NONE		
Course Content	Indicative Course Content **Nature of Business Research – Research Topic** • Understand and define the features of business research • Obtain a clear understanding of the different characteristics of research • Identify and evaluate the different attributes of a good research topic				

	• Analyze and apply the different techniques of generating research ideas • Demonstrate how research ideas can be refined • Consider different ways of writing a research question or a hypothesis • Comprehend the importance of theory in writing research questions and hypothesis • Understand the nature of data **Critically reviewing the literature** • Demonstrate awareness of current state of knowledge and identify how your research fits in the wider context • Evaluate research done by other authors in your subject area • Develop your research questions and objectives finding research opportunities not done until now • Discover and consider research approaches, strategies and techniques appropriate • Highlight the issues where your work will provide new insights demonstrating linkage to your research question and objectives • Consider all different types of sources available • Understand how literature needs to be properly referenced **Research strategy and design** • Understand the different strategies of doing research (quantitative and qualitative) • Identifying when each strategy would be appropriate to use and how to choose a method • Explain the process that has to be followed when doing research using a specific method • Evaluate the strategies considering related benefits, difficulties, and issues the researcher should take into consideration when using each method • Understand the concept of sampling and be able to use the appropriate sampling approach **Data collection using interviews** • Assess the various problems a researcher is likely to face associated with gaining access to the source • Design strategies to gain access • Understand how to overcome organizational concerns about the granting of access • Identify and evaluate the different types of interviews used to collect data • Design and conduct an interview **Analyzing qualitative data** • Identify the activities involved when analyzing qualitative data • Evaluate the usefulness of each activity • Understand all steps leading to a complete data analysis process **Introduction to Quantitative research** • Understand the concept of quantitative research and be able to separate it from qualitative research

- Learn about the major methods used for quantitative research, and be able to explain and compare them (advantages and disadvantages for each method)
- Become aware of the major elements of quantitative research such as variables, unit of analysis and sampling.
- Understand how to report quantitative data and findings.

Collection of quantitative data

- Develop skills on how to use online databases from various organizations in order to obtain data for an analysis
- Become familiar with the questionnaire techniques available and when it is appropriate to use a questionnaire Understand the use of the questionnaire
- Develop skills on how to design a questionnaire for a research analysis
- Learn important information needed when one wants to use a questionnaire for a quantitative research analysis

Analysis of quantitative data

- Learn how to import data in the excel package to create correct spreadsheets for the analysis of any data
- Analysis of questionnaire data
- Describe various variables using graphs – graphical analysis
- Summarize data using basic statistics – descriptive analysis
- Examine relationships between two variables using graphs and statistics
- Understand the concept of significance

Simple Regression Analysis for quantitative data

- Introduced to the concept of using a statistical method
- Learn about Simple Regression analysis
- Obtain the results from the application of the analysis
- Explain the results from regression estimation analysis
- Apply the method in excel using real actual data

Multiple Regression Analysis for quantitative data

- Understand the multiple regression analysis framework
- Estimate the multiple regression analysis model and obtain the results
- Explain the results from the model with respect to significance and coefficients
- Calculate various effects form one variable (or more) to another
- Construct predictions of the dependent variables
- Introduced to the concept of hypothesis testing

Multiple Regression Analysis: Extensions

- Find effects and explain when the unit of measurement of one or more variables change
- Estimate and explain multiple regression relationships in the form of logarithms and growth rates
- Understand and apply the concept of nonlinearity
- Estimate in excel nonlinear models and explain their results
- Become familiar with the dummy variables properties

	• Use dummy variables in regressions and evaluate the results
Teaching Methodology	Lectures, discussions, oral presentations, feedback based on the evaluation of the research project submitted. Students will be able to use the computer labs while producing their project, and will have access to statistical analysis packages so as to become familiar with quantitative data processing.
Bibliography	<u>Textbooks:</u> Bryman, A. and Bell, E. (2015) Business Research Methods. Fourth Edition, Oxford: Oxford University Press. Saunders, M., Lewis, P. and Thornhill, A. (2016) Research Methods for Business Students Seventh Edition, Harlow, Pearson. <u>References:</u> Wilson, J. (2014) Essentials of Business Research: A Guide to Doing Your Research Project Second Edition, London, Sage. Cohen, Louis, Morrison, Keith, Manion, Lawrence (2011) Research Methods in Education. Routledge. Tashakkori, A. and Teddlie, C. (2017) Mixed Methodology Combining Qualitative and Quantitative Approaches, Creswell, J.W. (2013). Research Design: Qualitative, Quantitative, and Mixed Methods. Miles, M. B., Huberman, A. M. and Saldana, J. (2014) Qualitative Data Analysis: A Mehtods Sourcebook. Third Edition, Thousand Oaks, Sage. Silverman, D., (2015). Interpreting Qualitative Data. 5th ed. Sage Publications. Anderson, R. D. (2014). Modern Business Statistics with Microsoft Excel.5th ed. Cengage Learning. Wooldridge, M., J. (2012). Introductory Econometrics: A Modern Approach, 5th edition, South-Western College Pub. <u>Scherbaum</u>, A., C, <u>and Shockley</u>, M.K. (2015). Analysing Quantitative Data for Business and Management Students. Sage Publications Ltd. Wooldridge, M., J. (2012). Introductory Econometrics: A Modern Approach, 5th edition, South-Western College Pub. <u>Scherbaum</u>, A., C, <u>and Shockley</u>, M.K. (2015). Analysing Quantitative Data for Business and Management Students. Sage Publications. Bast, C.M.,Hawkins, M. (2010). Foundations of Legal Research and Writing. DELMAR GENGAGE Learning (e-book, FUC Library). Journals: Educational Research and Evaluation,

	Educational Researcher, Educational Measurement, Issues and Practice.
Assessment	Assignment 40% (30% presentation / 70 % written project) / **Qualitative methods** Final exam 60% / **Quantitative methods**
Language	English