ANNEX 2 – COURSE DESCRIPTION

Course title	**Introduction to Research Methods**				
Course code	**LAW-103**				
Course type	**Compulsory**				
Level	**Undergraduate**				
Year / Semester	1st /A				
Teacher's name	Afxentis Afxentiou				
ECTS	6	**Lectures / week**	3 hours /week	**Laboratories / week**	
Course purpose and objectives	The course aims to help students understand and apply the basic methodological approaches to planning and conducting research. In addition, the course focuses on the research processes of collecting quantitative and qualitative data and on statistical analysis and interpretation of research design results. Through the course students will have the opportunity to study the different types of research and their stages, the process of developing research tools, such as the questionnaire and the interview protocol, the procedures of collecting, validating, and analysing quantitative data. Students will also get a deep understanding of the process of preparing a research proposal and a research paper.				
Learning outcomes	**Upon completion of the course, students will be able to:** • Understand the importance and the applications of research (CILO 1). • Understand the basic types of research and the stages of their conduct (CILO 2). • Use various techniques to collect quantitative and qualitative data (CILO 3). • Use the basic strategies for analyzing quantitative data (CILO 4). • Interpret the results of descriptive and inductive statistical analysis (CILO 5). • Gain technical and research skills in using statistical analysis software (SPSS, JASP & Jamovi) (CILO 6).				

	• Critically study research articles that present analyses of quantitative and qualitative data on educational research (CILO 7).		
Prerequisites	N/A	**Required**	N/A
Course content	**1st Lesson** A) Analysis of the course schedule, Information on the organization and conduct of meetings, Presentation of the proposed literature, Discussion on the experiences of students in conducting research and discussion on their views on the role of educational research in improving educational processes. B) Research strategies: Experimental research, Review research, Case studies. **2nd Lesson** A) Research techniques: The distinction between quantitative and qualitative research. B) Differences between quantitative and qualitative research, based on their philosophical origins and differences in their methodologies. **3rd Lesson** A) Purpose and nature of the research questions of quantitative research. B) The design of the research. Categorization of the research based on their general purpose. C) The "Emergent Design" model; the use of conceptual maps. **4th Lesson** A) Importance and use of the theoretical background. B) Types and definition of variables. C) Measurement scales. **5th Lesson** A) Data collection with a questionnaire, questionnaire design, pilot study for validating the research tools. **6th Lesson** A) Data collection with interviews. Interview types (Structured - Semi-structured - Unstructured).		

	B) Design, organization and conduct of an interview. Data analysis of interview data. **7th Lesson** A) Sampling types in quantitative research. Sampling weights, sample size, sampling error, forms of intentional sampling in qualitative research. **8th Lesson** A) Quantitative data analysis strategies: Descriptive, Correlation and Inductive statistical analysis. Relationships between two and / or more variables. B) Descriptive Statistics: Descriptive Statistics (Mode, Median, Mean, Standard Deviation, Skewness, Kurtosis, SE Mean), Boxplot. **9th Lesson** A) Normal distribution. The Levene Test. Tests of Normality (Normal Plot, Detrended Normal Plot, The Lilliefor's Test, The Shapiro Wilk's Test). **10th Lesson** A) Selection of statistical criteria. Level of statistical significance. B) Inductive Statistics - Parametric: Sampling Distributions, Standard Error, Independent-samples t-test, One-sample t-test, Paired-samples t-test. **11th Lesson** A) One-way ANOVA & Multiple comparison procedures (Bonferroni and Scheffe tests). **12th Lesson** A) Linear Regression Analysis. Multiple Regression Analysis. Weighted Least-Squares Regression. Non parametric criteria: Mann-Witney, Kolmogorov-Smirnov, Kruskal-Wallis one way analysis of variance, Kendall's W, Wilcoxon, Sign.
Teaching methodology	Presentations, individual and group assignments, quizzes, case studies, discussions
Bibliography	**Main Bibliography** •American Psychological Association (2019). Publication manual. (7th ed.). APA.

	•Creswell, J. W., & Creswell, J. D. (2022). Research design: Qualitative, quantitative, and mixed methods approaches. Sage publications. •Della Porta, D., & Keating, M. (Eds.). (2008). Approaches and methodologies in the social sciences: A pluralist perspective. Cambridge University Press. •Khoa, B. T., Hung, B. P., & Hejsalem-Brahmi, M. (2023). Qualitative research in social sciences: data collection, data analysis and report writing. International Journal of Public Sector Performance Management, 12(1-2), 187-209. •Pawar, P. B., Verma, R., Daniel, C. O., & Sayyad, L. (2023). Foundation of Research Methodology: A Comprehensive Guide. Red Unicorn Publication. •Savin-Baden, M., & Major, C. (2023). Qualitative research: The essential guide to theory and practice. Routledge. **Complementary Bibliography** •Green, S.B., & Salkind, N. J. (2016). Using SPSS for Windows and Macintosh a la Carte (8th ed.). Pearson. •Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. Journal of economic development, environment and people, 7(1), 23-48. •Cronbach, L. J. (3rd Ed) (1990). Essentials of Psychological Testing. New York: Harper & Row. •Nehru Pasoloran Pongsapan, M. P., Allo, M. D. G., & Rumpa, L. D. (2023). A Guide To Research Proposal. Deepublish.
Assessment	1. Assignment – Presentation 30 % 2. Class Participation 10 % 3. Final Exam 60 %
Language	Greek