ΔΙΠΑΕ CYQAA

ΦΟΡΕΑΣ ΔΙΑΣΦΑΛΙΣΗΣ ΚΑΙ ΠΙΣΤΟΠΟΙΗΣΗΣ ΤΗΣ ΠΟΙΟΤΗΤΑΣ ΤΗΣ ΑΝΩΤΕΡΗΣ ΕΚΠΑΙΔΕΥΣΗΣ
THE CYPRUS AGENCY OF QUALITY ASSURANCE AND ACCREDITATION IN HIGHER EDUCATION

PHDED903 - DATA COLLECTION AND ANALYSIS II

Course Title	DATA COLLECTION AND ANALYSIS II				
Course Code	PHDED903				
Course Type	CORE				
Level	DOCTORAL				
Year / Semester	1ST/ SPRING				
Teacher's Name	PANAYIOTIS LOUCA				
ECTS	10	Lectures / week	2H	Laboratories / week	1H
Course Purpose and Objectives	The course builds upon and complements students' research skills and competences developed in PHDED901 Collection and analysis of research data I. The course aspires to enable students to conduct high level data analysis techniques which apply to qualitative and quantitative research. The course engages students in advanced statistical analysis techniques which are widely used by social researchers worldwide. The same applies to qualitative data analysis. Likewise, the course focuses on providing students with the opportunity to become professional users of data analysis software, such as IBM SPSS, QDA MINER, PSPP, SMART PLS etc. The course makes use of real research data in practical data analysis applications in order for students to become able to apply the same tools and analyses in their own data collected for their doctoral dissertations. The course also stresses the importance of adopting a critical stance when reviewing research literature and use their acquired knowledge and competences to evaluate value and trustworthiness.				
Learning Outcomes	Students are expected to: 1. Design and apply a data collection and analysis scheme that applies to their own research questions/hypotheses. 2. Use and review a wide range of research approaches (both quantitative and qualitative) for analysing data. 3. Apply methods of qualitative data analysis that fall under the grounded theory approach, such as constant comparative method and analytic induction. 4. Convert qualitative into quantitative data and justify the advantages and limitations of such transformation. 5. Process and analyse qualitative data using qualitative data analysis software (i.e. QDA MINER). 6. Apply inferential statistics tests to quantitative data such as t-test, correlation, one-way ANOVA, two-way ANOVA, ANCOVA, MANOVA, MANCOVA) and the respective non-parametric tests, multivariate liner regression models, using IBM SPSS.				

	7. Evaluate the appropriateness of theoretical models using quantitative data through applying Structural Equation Modelling statistical techniques. 8. Enter, process and analyse quantitative data using IBM SPSS. 9. Critically review research literature and evaluate it based on generally accepted criteria.
Prerequisites	PHDED901	Required	
Course Content	1. Analysis of qualitative data. Qualitative data analysis as a personal processes and as a journey towards a grounded theory. The constant comparative method and analytic induction for analysing qualitative data. Qualitative data analysis software (QDA MINER). 2. ANOVA factorial designs. Between subjects, within subjects and mixed designs. Univariate and multivariate ANOVA designs. Using Covariates in ANOVA factorial designs. 3. Building Regression Models. Selecting methods in regression analysis (enter, forward). Data screening and preparation. Comparing alternative models. 4. Structural Equation Modelling. Confirmatory Factor Analysis. Goodness-of-fit measures.
Teaching Methodology	The course is taught using a variety of teaching methodologies that include lecturing, project-based learning, hands-on training, collaborative approach.
Bibliography	Cohen, L., & Manion, L., Morrison, K. (2017). *Research methods in education* (8th ed.). New York: Routledge.[1] Denzin, N. K., & Lincoln, Y. S. (2011). *Handbook of qualitative research* (4th ed.). London: Sage Publications. Kline, R. B. (2010). *Principles and practice of structural equation modelling*. New York: Guilford press. Silverman, S. J., Locke, L. F., & Spirduso, W. W. (2007). *Proposals that work: A guide for planning dissertations and grant proposals*. London: Sage Publications. Creswell, J. W. (2008). *Qualitative, quantitative, and mixed method approaches.* London, Sage. Biesta, G. J. J., & Burbules, N. C. (2002). *Pragmatism and educational research.* London: Falmer. Denzin, N. K., & Lincoln, Y. S. (Eds.). (2007). *Collecting and interpreting qualitative materials*. London: Sage Publications, Incorporated. Green, J., Camilli, G., & Elmore, P. (Eds.). (2006). *Handbook of complementary methods in education research*. New Jersey: Lawrence Erlbaum Associates, Inc., Publishers. Silverman, D. (2006). *Interpreting qualitiative data,* (3rd ed.). London: Sage.

	Silverman, D. (2009). *Doing qualitative research: A practical handbook*, (3rd ed.). London: Sage. Wellington, J. (2000). *Educational research: Contemporary issues and practical approaches.* London: Continuum.
Assessment	Final Written Examination (50%) Qualitative Research Project (20%) Quantitative Research Project (30%)
Language	Greek