SCHOOL OF EDUCATIONAL SCIENCES AND SOCIAL SCIENCES DEPARTMENT OF PSYCHOLOGY AND SOCIAL WORK

(CIP file- Classification of instructional programmes)

Course title	Research Methods
Course code	DLSPS503
Course type	Compulsory
Level	Master (2 nd Cycle)
Year / Semester of study	1 st /1 st
Name	Prof. Rita Panaoura, Dr Stefani Pantelidou
ECTS	10
Course purpose	The course aims to enable students to construct a comprehensive understanding of research methods in social sciences in general and in the specific domain of the master in particular. Furthermore, the course aims to facilitate students to develop skills and competencies related to the planning and materialisation of master thesis and other research activities. It focuses on data collection and analysis as means for reaching to justified answers to the posed research questions. The course covers the fundamental methodological approaches to I research, quantitative and qualitative, as well as mixed methods approaches. The course adopts a critical approach towards research methods, through which it presents students with their advantages, disadvantages, limitations and epistemological differences. The major objectives of the courses could be defined as: (a) to design and implement a research proposal and (b) to evaluate critically studies on the specific domain.
Learning Outcomes	 With the completion of the module, students should be able to: Understand the main characteristics, elements, similarities and differences of the quantitative and qualitative research methods. The process of triangulation. Propose a schedule for a research plan (purpose, research questions, significance, originality and rationality) Conduct appropriate literature review by using relevant data bases. Apply the appropriate methodology in order to collect and analyse data by having in mind (and use them as arguments) the main strengths and limitations of each method. Apply appropriate methodological approach for the collection, organisation, encoding, and analysis of quantitative data, having in mind the advantages and limitations of quantitative research. Apply appropriate methodological approach for the collection, organisation, encoding, and analysis of quantitative data,

	having in mind the advantages and limitations of qualitative research. Select the appropriate sampling method and/or technique, when given a specific research context. Examine the validity and the reliability by different was. Find and construct useful and appropriate research tools (test, questionnaire, interview, observation). Analyze qualitative data by using NViVo or Atlas.ti Make use of descriptive statistics indices to present the central tendency and variance of variable measurements and identify statistically significant differences between groups and relations between variables. Evaluate the normality of variable measurements and indentify potential outliers. Apply inferential statistics tests to quantitative data such as test, correlation, one-way ANOVA and Exploratory Factor Analysis, regression analysis. Present appropriately the results and prepare a manuscript for publication or for a proposal. Define the limitations and suggest future studies.
Prerequisites	Co-requisites
Course contents	 Quantitative and qualitative study. Philosophy and the process of triangulation. Ethics in data collection and results disseminations. Ethics in conducting research with children. Reviewing the literature and Literature Review using online databases and search tools. Strategic literature review. Conduct the literature review and construct the theoretical framework. APA style. Linking research questions with data collection. Identifying variables and planning research Purpose, research questions and research hypotheses. Variables and scales. Research tools in quantitative research: test, questionnaire, interview, observation. Validity and reliability. Research tools in qualitative research: interview, observation, case study, diary etc. Validity and reliability. Sampling. Standard error. Normal distribution. Representative sample. Analysis of qualitative data. NViVo and Atlas.ti Analysis of quantitative data (descriptive statistics, factor analysis, regression analysis, mean comparison) T-tests, one-way ANOVA, Pearson's correlation, Exploratory Factor Analysis, Regression analysis by using IBM SPSS. Preparation of a scientific manuscript or a scientific publication. APA style
Teaching methodology	The teaching methods are based on the principles of the e-learning processes which emphasize the use of direct and indirect communication, synchronized and unsynchronized methods among the participants (teleconference, online meetings, power point presentations, narrative presentations, forums for discussion, wikis for group work etc). All the

above-mentioned materials are uploaded at the platform which has been constructed for the e-learning teaching (LMS). Students are encouraged to communicate through the platform with other students and the teacher in order to discuss, pose their questions, and communicate actively. In specific weeks they have to pose their suggestions and concepts on specific issues which are posed for discussion (through the forum). Their evaluation involves different types of assignments, peer-evaluation methods and self-evaluation methods.

References

- Cooper, H., Coutanche, M. N., McMullen, L. M., Panter, A. T., Rindskopf, D., & Sher, K. J. (Eds.). (2023). APA handbook of research methods in psychology: Research designs: Quantitative, qualitative, neuropsychological, and biological, Vol. 2, 2nd ed. APA.
- Breakwell, G., Wright, D., & Barnett, J. (2021). Research methods in psychology. Sage.
- Heath, W. (2018). Psychology research methods: Connecting Research to Students' Lives. Cambridge University Press.
- Beins, B. (2012). *APA style simplified: Writing in psychology, education, nursing, and sociology.* Oxford: Wiley-Blackwell.
- Ευαγγέλου, Ε. (2014). Η χρήση της μεθοδολογικής τριγωνοποίησης στην έρευνα της ποιότητας ζωής των ψυχικά πασχόντων που ζουν στην κοινότητα. Ε-περιοδικό Επιστήμης και Τεχνολογίας, 2 (9), 113-120. In Greek
- Krieglstein, F., Beege, M., Rey, G.D. et al. (2022). A Systematic Meta-analysis of the Reliability and Validity of Subjective Cognitive Load Questionnaires in Experimental Multimedia Learning Research. Educational Psychological Review https://doi.org/10.1007/s10648-022-09683-4
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- Sheppard, V. (2020). Research methods for the social sciences. E-book (https://pressbooks.bccampus.ca/jibcresearchmethods/).

Many times, papers from International Journals will be used such as:

Learning and Instruction
Cognitive Development
Educational Psychology
British Journal of Educational Research
Child Development
Intelligence
Frontiers in Psychology
Journal of Educational Psychology

Assessment methods and criteria	 Final exam (50%) Group work, forums, self-assessment (10%) Manuscript critical analysis (15%) Project (25%)
Language	Greek