PHDHS113- Research Methods - Research Planning I

Course Title	Research Methods / Research Planning I				
Course Code	PHDHS113				
Course Type	Compulsory				
Level	PhD (Level 3)				
Year / Semester	2nd year / 3th semester				
Teacher's Name	Dr. Charalambous Georgios				
ECTS	10	Lectures / week	3	Laboratories / week	NA
Course Purpose and Objectives	The course offers an introduction to research methodology and how to write scientific research reports and project proposals. The course will introduce students to the challenges in research design and analysis as well as preparing students in writing their thesis. There will be offered both theoretical perspectives and practical exercises. This course focuses on topics such as science, research, validity, research processes and problems, research issues and questions and the significance of research. The course aims to provide students with a broad overview of different research designs in the Health sciences. A research design is a blueprint that connects the different stages of the research process in a logical way such that new knowledge can be generated in an unbiased and robust way. There is a range of different designs, such as longitudinal and cross-sectional, or experimental and observational research designs. The choice of a research design should suit the research question to be answered. The research design determines which methods can be used to answer the question. Research designs for qualitative and for quantitative research as well as mixed-methods designs exist. The course aims to provide an introductory overview across these types of research and expose students to a range of advanced methods that are most commonly employed across the social sciences. It improves students' skills around developing a strong and robust research design and outlines clear guidelines for distinguishing good research from bad research. In addition to exposure to a variety of designs and corresponding methods as well as the different stages of the research process, students will learn how to combine these different elements in order to increase the quality of their own research. At the end of the course, students should be able to make an informed decision on how to select a good research question, how to select cases, how to measure and collect data, and what methods to choose for the analysis in their own prospective research. Rather than selecting methods by personal taste or abilities, students will be enabled to select appropriate methods in an informed way in order to maximise the validity of the findings they generate.				

	Intended for students early in their doctoral studies, this course helps orient students toward their dissertation research and provides guidance in planning course work and writing that will facilitate dissertation completion. It introduces the dissertation process, including requirements, procedures, timelines, and research topics. COURSE GOALS • Explain the requirements and procedures in dissertation research. • Increase awareness of strategies to facilitate dissertation completion. • Identify appropriate topics for dissertation research. • Write appropriate research questions. • Choose an appropriate research methodology.
Learning Outcomes	Upon completing this course, each student will be able to: 1. demonstrate knowledge of research processes (reading, evaluating, and developing); 2. perform literature reviews using print and online databases; 3.identify, explain, compare, and prepare the key elements of a research proposal/report; 4. define and develop a possible research interest area using specific research designs; 5. compare and contrast quantitative and qualitative research paradigms 6. describe, compare, and contrast descriptive and inferential statistics, and provide examples of their use in research; 7. describe sampling methods, measurement scales and instruments, and appropriate uses of each; 8. explain the rationale for research ethics, and the importance of and local processes for Institutional Review Board (IRB) review; and 9. demonstrate how educational research contributes to the objectives of your doctoral program . **Knowledge** • To be able to understand the different stages of a research process • To be able to understand what a research question is and the importance of formulating relevant ones • To be able to recognize the relationship between theory and evidence • To make students familiar with the relationship between authors and readers and their different roles. • To make students aware of ethical issues in research. **Skills** • To be able to classify and evaluate the strengths and weaknesses of the research design of social research. • To enable students to describe scientific texts based on a general structure of such texts. • To enable students to write their own research proposal.

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- To be able to define and use key concepts in research and research ethics.
- To develop the ability to convert own interests and ideas into relevant research questions.
- To be able to develop answers to research questions in a scientific way.

General competence

The course shall aid students **to develop a critical analytical state of mind** and to strengthen develop their ability to perform research (both empirical and theoretical studies).
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<tr><td>Prerequisites</td><td></td><td>Required</td><td>Epidemiology - biostatistics</td></tr>
<tr><td>Course Content</td><td colspan="3">Module 1: Overview of Research Process, Resources, and Developing a Research Topic The role of research; the steps in conducting research; the broad area of research interest and potential research questions; your master’s research project.
Module 2: The Literature Review Identifying sources; strategizing the literature review.
Module 3: Constructing Hypotheses, Identifying Variables How to identify concepts related to your research and develop operational definitions, building a conceptual model for your research, analyzing the relationships between identified variables to understand what data you need to collect in your research
Module 4: Types of Study Designs Components of research design; differences between qualitative and quantitative designs; suitability of various study designs Module 5: Selecting a Method of Data Collection Choosing the appropriate method for data collection, the level of formality in interviews and surveys, and selecting samples; qualitative research and evaluation research
Module 6: Selecting a Method of Data Collection Speculations and claims, reasoning and evidence; role of theory.
Module 7: Putting it all together; Ethical Issues in Research, Validity and Reliability in Research Understanding ethical issues in research design, using the Institutional Research Board for research involving human subjects, understanding threats to internal and external validity in research</td></tr>
<tr><td>Teaching Methodology</td><td colspan="3">Lectures and interactive learning/workshop</td></tr>
<tr><td>Bibliography</td><td colspan="3">Tuckman, B. W. & Harper, B. E. (2012). Conducting educational research (6th ed.). Lanham, MD: Rowan & Littlefield Publishers. (ISBN: 978-1-4422-0964-0) Doctoral Student Handbook And Dissertation Style Guide. (2011).

Kumar, Ranjit. (2014). Research Methodology: A Step-by-Step Guide for Beginners. Fourth Edition. Thousand Oaks, California: Sage Publications.

Yin, R. K. (2013). Case study research: Design and methods. Sage publications</td></tr>
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	Creswell, J. (2016). Η Έρευνα στην Εκπαίδευση. Σχεδιασμός, Διεξαγωγή και Αξιολόγηση Ποσοτικής και Ποιοτικής Έρευνας (Επιμ.: Χ. Τσορμπατζούδης, 2η έκδ.). Αθήνα: Ίων. Δαφέρμος, Μ., & Τσαούσης, Γ. (χχ). Οδηγός συγγραφής διπλωματικών εργασιών και διδακτορικών διατριβών. Ρέθυμνο: Τμήμα Ψυχολογίας Παν/μίου Κρήτης. Ευδωρίδου, Ε., & Καρακασίδης, Θ. (2018). Ακαδημαϊκή γραφή (3η έκδ.). Αθήνα: Τζιόλας
Assessment	This is a “Pass” / “Fail” course. A student is granted a passing grade if he gets a passing grade in the parts of the Qualifying Exam.
Language	GREEK-ENGLISH