ANNEX 2 – COURSE DESCRIPTION

Course Title	**Research Methodology**				
Course Code	**PHA706**				
Course Type	Compulsory				
Level	Post-graduate (Master)				
Year / Semester	1st / 2nd Semester				
Teacher's Name	Dr Aggeliki Stamouli, Dr Dimitrios Panides				
ECTS	7	Lectures / week	2	Laboratories/week	-
Course Purpose	The aim of the course is to provide the postgraduate students with knowledge of research methodology and to prepare them for scientific research. It is also intended to provide students/trainees with an in-depth understanding of all stages of carrying out a scientific research, such as planning, reviewing literature, defining variables, developing research tools, sample selection, qualitative, quantitative and mathematical / statistical data collection and analysis together with drawing conclusions. Students will also familiarized with the principles of evidence-based medicine. Finally, recent scientific findings presented in selected scientific literature on cosmetology will be critically assessed and discussed.				
Learning Outcomes	**By the end of the program students will be able to:** • Explain the concepts, principles and methods of scientific process and research. • Define the research control procedures and formulate a research proposal • Develop appropriate skills in the processes of measuring, writing a research problem, formulating research questions and formulating hypotheses. • Describe the types of research and the stages of research • Specify types of variables and observation methods. • Understand the operation of measurement scales and the concepts of reliability and validity in quantitative research • Understand the methodology of qualitative research and the ethical issues involved in the research process and the rules that govern it. • Recognize the different sampling methods. • Perform statistical analysis of data. • Describe the principles of evidence-based medicine • Organize and carry out bibliography search, writing a thesis and discussing research results. • Evaluate and discuss research data • Apply the results of the research				
Prerequisites	-			Corequisites	-

Course Content	Introduction to scientific research. Sources of knowledge. The scientific method and the production of new knowledge. Generalization and Induction, Assumptions, Variables and Theoretical Background. Controlled observation, verification, theory and observation dependence, the validity of induction. The research proposal - the research protocol. Overview of the research process: the intellectual phase, the planning and programming phase, the empirical phase, the analytical phase, the results dissemination phase. The literature review. The Quantitative and Qualitative Research Methodology. Ethical Issues and Research Ethics. Tool development and weighting. Population and sample. Quantitative data analysis and presentation of research results. Data collection methods in quantitative and qualitative research. Qualitative research and analysis Presentation of research results. Overview of evidence-based practice research. Applying Research to Health Sciences.
Teaching Methodology	The teaching methodology includes Power Point Presentation lectures to offer the theoretical background and discussion in the classroom. Student's participation and dialogue is encouraged, with questions and opinions expressed during the lesson. Students are recommended to the corresponding textbook as well as related scientific articles. Critical literature assessment is practiced.
Bibliography	**Textbooks:** 1. Μεθοδολογία της έρευνας στις επιστήμες υγείας. Λαγουμιντζής Γ., Εκδόσεις Κάλλιπος, 2015. 2. "Α. Σαχίνη – Καρδάση ¨Μεθοδολογία έρευνας. Εφαρμογές στο χώρο της υγείας. Εκδοτικός οίκος: Εκδόσεις ΒΗΤΑ, 2005 Β΄ επανέκδοση. 3. O'Brien, P., & Broughton Pipkin, F. (Eds.). (2017). *Introduction to Research Methodology for Specialists and Trainees*. Cambridge: Cambridge University Press. **References:** 1. Haynes B.R., Sachett D., Guyatt G., Tugwell P. (2006). Clinical Epidemiology. How to Do Clinical Practice Research, Lippincott Williams and Wilkins, A Wolters Kluwer Company, New York. 2. Scientific articles.
Assessment	• Mid Term Exam and exercises **40%** • Final Examination **60%** Course evaluation is done by: (a) a written examination and exercises assigned to students during the semester account for 40% of the total grade (b) a final written examination which examines all modules of the course material and it accounts for 60% of the total grade. Students are prepared for the above written exams over the theoretical and practical background in the classroom and with additional exercises given to them for further practice. For the better comprehension of the subject frequent revisions are performed at regular intervals. Questions of gradual difficulty apply to the evaluation of the mid-term and final examination. There may be multiple choice or right/wrong questions with justification of the answers or issue analysis and problem solving questions may be applied in order to evaluate the knowledge and perception of the student on the subject.

	The above criteria and assessment tools, as well as their weight, are communicated to the students, and are formulated in such a way in order to maximize the expected learning outcomes as well as the quality of the course.
Language	Greek and English