

Research Methodology

Semester: A' (1st)

Teaching units ECTS: 7

Code:

Hours: 2 Theory/ 1 Core Exercise practice

Aim of the module: Aim of the module is to guide students acquire skills of searching scientific evidence, understand and use qualitative and quantitative research methods and at the same time critically evaluate published scientific studies especially in the health field. Moreover, the module aims to guide students acquire the required skills for the preparation, design and elaboration of research projects at MSc level and especially with regards to the dissertation thesis.

Student aims: With the successful fulfillment of the module the student will be capable of:

- 1) Understand the basic concepts, the evolution and research philosophy.
- 2) Realize the importance of undertaking research and the differences between qualitative and quantitative research.
- 3) Understand the concept of research question and be able to undertake it (background frame literature review, research filed and conclusion making)
- 4) Organise and design the distinct stages of research, taking into consideration the research ethics and research concerns.
- 5) Understand the problems and bias of published studies and be able to critically evaluate them.
- 6) Understand the strategies of presenting research or literature review findings and undertake a successful presentation.

Module content:

Within the frame of the module the **thematic units** of research that will be developed: Historical background, (characteristics, aims, type-modes, and usefulness of scientific research). Role of deontology & research ethics especially in the Health field. Search strategies for information, databases, literature sources in the Health field. Research process (research question, research proposal, research protocol, research designs and research hypothesis). Quantitative and qualitative research, sampling, research bias, reliability and validity, data collection and organization). Overview (narrative, systematic review, meta-analysis). Presentation of research findings. Research critical analysis. Critical reading. Writing and oral presentation of a research study.

Methods and means of teaching: 13 weeks X 2 hours & 1 hour exercise practice

Assessment methods:

- Final Written examination (60%), that could contain :
- Delivery and presentation of individual written study. (30%)
- Delivery of group written study & presentation (10%).

References (indicative):

1. Hicks C. Research Methods for Clinical Therapists, 4^η έκδοση, Εκδόσεις Churchill Livingstone, 2004
2. Sim J. and Wright C. Research in Health Care, Εκδόσεις Stanley Thorne, 2000
3. Polgar S. and Thomas S.A. Introduction to Research in the Health Sciences, 5^η έκδοση, Εκδόσεις Churchill Livingstone, 2008
4. Thomas, J., Nelson, J. Μέθοδοι Έρευνας Στη Φυσική Δραστηριότητα, Εκδόσεις Πασχαλίδη, 2003
5. Ζαφειρόπουλος Κ. Πώς γίνεται μια επιστημονική εργασία; Επιστημονική έρευνα και συγγραφή εργασιών, Εκδόσεις Κριτική, 2005
6. Καμπίσης Χ. Η Έρευνα Στις Αθλητικές Επιστήμες, Εκδόσεις Τσαρτσιάνης Θεσσαλονίκη, 2004.
7. Understanding Physiotherapy Research
8. Littlewood Ch. , May St. Understanding Physiotherapy Research. Εκδόσεις Cambridge Scholars Publishing, 2013.