

 **Module (Course Syllabus) Catalogue**

**2023-2024**

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| **College/ Institute**  | **Erbil Technical Health College** |
| **Department** | **Physiotherapy** |
| **Module Name** | **Evidence based practice** |
| **Module Code** | **EVB503** |
| **Degree** | **Technical Diploma Bachelor High Diploma Master PhD** |
| **Semester** |  **5th**  |
| **Qualification** |  **M.A. In Educational Psychology, and Ph.D. in Curriculum and Education**  |
| **Scientific Title**  |  **Lecturer** |
| **ECTS (Credits)** |  **5** |
| **Module type** | **Prerequisite Core Assist.**  |
| **Weekly hours** |  **3hr** |  |
| **Weekly hours (Theory)** | **( 2 )hr Class** | **( )Total hrs Workload** |
| **Number of Weeks** | **12** |
| **1st Lecturer**  | **Dr. Zhwan Dalshad Abdullah** |
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| **2nd Lecturer** | **Dr. Mahdi Khalid Qadir** |
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| **3rd Lecturer** | **Ghariba Ali** |
|  | **Ghariba.ali@epu.edu.iq** |
| **Websites**  |  |

**Course Book**

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| **Course** **Description** | The goal of this course is for students to acquire knowledge regarding what is research methodology, what are the types of research designs, steps in the research process: Identifying a research problem, Reviewing the literature, Specifying a purpose and research questions or hypotheses, Collecting either quantitative or qualitative data, Reporting and evaluating the research.  |
| **Course objectives** | The main objective of the Research methodology course would be that students will be able to:- begin to conduct research. - read and evaluate research studies.- Identify the type of research designs associated with quantitative and qualitative, and Identify the characteristics of quantitative and qualitative research.- Distinguish between the types of research Variables.- Identify a problem that defines the goal of research- Gather data relevant to the research using the appropriate research instrument.-Identify the population and using sampling techniques to determine the sample size of the study.  |
| **Student's obligation** | • Reading and understanding of study notes• Participation in forum, lab and class exercise and discussions• Seminar presentation• Participation in active communication with the lecturer• Regular assignment submission |
| **Required Learning Materials**  | Lectures notes, videos, audios, homework exercises, self-study, Hall, projector. |
| **Evaluation** | ‌ **Task** | **Weight (Marks)** | **Due Week** | **Relevant Learning Outcome** |
| Paper Review  |  |  |  |
| **Assignments** | Homework | 10% | 2nd &4th  | 1,3,4,6,7 |
| Mini Project | 8% | 11th  | 1,-10 |
| Report |  |  |  |
| Seminar | 8% | 12 | 9,10 |
| Essay |  |  |  |
| Class Activity | 2% | All | All |
| Quiz  | 8% | All | All |
| Midterm Exam  | 24% |  |  |
| Final Exam  | 40% |  |  |
| Total | 100% |  |  |
| **Specific learning outcome:** | **1**-Ability to develop general knowledge in Research Methodology and understand the subjects of the module.**2-** Ability to write problem statement using the keys. **3**- Ability to locate the database and research studies to write a literature review, and following the appropriate writing style for citation and referencing.**4-** Ability to adapt or adopt the appropriate instrument to collect the data.**5-** Ability to develop the appropriate instrument to collect the data**6-** Ability to determine the appropriate sampling techniques based on research design. **7-** Ability to write the research objectives, questions, and hypothesis based on the purpose of research.**8-** Ability to describe outcome measures, apply outcome measure in Prosthetics and Orthotics, analyze and interpret results of outcome measures.**9-** Ability to write a discussion and conclusion of the study findings and the citations with referencing.**10-** Ability to present a research work in oral way, written formats, following general rules and principles.**11-** Ability to discuss the circumstances that have resulted in an emphasis on the use of evidence in practice.**12-** Ability to distinguish among definitions of evidence-based medicine, evidence-based practice, and evidence-based physical therapist (EBPT) practice.  |
| **Course References‌:** | * Main textbook - Study notes
* Clinical Research Methodology.pdf
* [file:///C:/Users/High%20Tech/Downloads/Telegram%20Desktop/Rehabilitation\_Research\_Principles\_and\_Applications\_Carter,\_Russell.pdf](file:///C%3A/Users/High%20Tech/Downloads/Telegram%20Desktop/Rehabilitation_Research_Principles_and_Applications_Carter%2C_Russell.pdf)
* Foundations of Clinical Research Applications to Practice 3rd Edition Leslie G. Portney.

<https://www.semanticscholar.org/paper/Foundations-of-Clinical-Research%3A-Applications-to-Fapta-Ms/5fc8dfae713b16c2b81d203557f11b7a6ea6ce88>* References textbook and data (Journal, report, website and ETC.)
* John W. Creswell, Planning, Conducting, and Evaluating Quantitative and Qualitative Research, 2012
* <http://repository.unmas.ac.id/medias/journal/EBK-00121.pdf>
* Indrayan, Abhaya. 2012. Medical Biostatistics, Third Edition
* CHAP T. LE. 2003. INTRODUCTORY BIOSTATISTICS, John Wiley & Sons

[http://www.hstathome.com/tjziyuan/Introductory%20Biostatistics%20Le%20C.T.%20%20(Wiley,%202003)(T)(551s).pdf](http://www.hstathome.com/tjziyuan/Introductory%20Biostatistics%20Le%20C.T.%20%20%28Wiley%2C%202003%29%28T%29%28551s%29.pdf)* Anderson, C. TED Talks: The Official TED Guide to Public Speaking. Houghton Mifflin Harcourt 2016
* Ostler C, Scott H, Sedki I, Kheng S, Donovan-Hall M, Dickinson A, Metcalf C. From outcome measurement to improving health outcomes after lower limb amputation—A narrative review exploring outcome measurement from a clinical practice perspective. Prosthetics and Orthotics International 2022; 46 (4):341-350

**Additional Materials*** YK Singh · 2006. Fundamental of Research Methodology and Statistics
* <https://mfs.mkcl.org/images/ebook/Fundamental%20of%20Research%20Methodology%20and%20Statistics%20by%20Yogesh%20Kumar%20Singh.pdf>
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| **Course topics (Theory)**  | **Week** | **Learning Outcome** |
| **L01:** **Introduction to Research Methodology:** Meaning of Research, Objectives of Research, Determinants of scientific methodology, , Types of Research, Research Methods v/s Methodology, Research Process, and Criteria of Good Research |  | 1,2 |
| **L02: Problem Identification & Formulation:** Concept and need, Identification of Research problem, defining and delimiting Research problem.  |  | 1,2 |
| **L03: Review of related literature:** its implications at various stages of research (Formulation of research problem, hypothesis, interpretation and discussion of results).Purpose statements |  | 3,4,7 |
| **L04: Research Variables, Research objectives, Research question, Research Hypotheses:** directional and non-directional hypotheses, Hypothesis Testing |  | 2,7 |
| **L05: Research Design I:** Meaning of Research Design, Characteristics of Research Design, Steps in Research Design. |  | 1, 6 |
| **L06:** **Research Design** **II** |  | 1, 6 |
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| **L07: Instruments for Data Collection:** Collections of Primary Data, Collection of Data through questionnaire and Schedules, other Observation Interview Methods, Collection of Secondary Data, Case Study, Focus Group Discussion, Techniques of developing research tools, Questionnaire and rating scales etc. |  | 4,5 |
| **L08: Reliability and validity of Research tools.** |  | 4,5 |
| **L09: Sampling:** Probability and Non Probability sampling- types and criteria for selection. **I** |  | 6 |
| **L10: Types and criteria for selection. II** **Writing Research Report:** Major findings, Conclusions and suggestions. |  | 6 |
| **L11: Discuss the circumstances that have resulted in an emphasis on the use of evidence in practice.** |  | 11 |
| **L12: Distinguish among definitions of evidence-based medicine, evidence-based practice, and evidence-based physical therapist (EBPT) practice.** |  | 12 |
| **Final exam** |
| **Questions Example Design**Q.1)  |
| **Extra Note** |
| **External evaluator**  |