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| <b>ID</b>                | 745   |
| <b>Curricular Unit</b>   | Methodology of Scientific Research  |
| <b>Regent</b>            | Pedro Jorge Moreira de Parrot Morato  |
| <b>Learning Outcomes</b> | Introduce the student to scientific thought. About the evolution of scientific thought in Human Kinetics. Mastering fundamental concepts of scientific research: problem, hypothesis, research design, method. Mastering the essential aspects of the scientific method. Know different types of study and the context of its application. Mastering methodological alternatives for the same problem. Mastering APA style for writing manuscript and bibliographic referencing.  |
| <b>Syllabus</b>          | I. Introduction 1. Research in the science of human movement 2. Definition of science (science and research)? What is the methodology and method? 3. Ethical aspects of scientific research II. Prepare research (what is known about the subject and what remains to) 4. Choose a topic / problem to investigate, issues and research objectives and strategies to address these issues (focus on the problem, identify variables, operationally define variables, specify the problem, hypotheses) 5. Employing theories (models, concepts and hypotheses), 6. A literature review. III. As will study 7 Choose a method (types of research methods, planning, design and procedures) 8 Nature of research:.. Variables and their measurement, validity, and sensitivity 9 faithfulness Representativeness of research:.. Sampling and circumstances (context and task to investigate) 10. Collecting data (data types, data selection, collection types) a. Neurophysiological level b. Reported level (verbal) c. Behavioral level IV |
| <b>Evaluation</b>        | 1. Continuous Assessment<br>Students who opt for continuous assessment model shall meet the following requirements:<br>a) Get at least two thirds of attendance in practical classes;<br>b) Implement a practical group work (orientated during the practical classes) and perform their oral presentation;<br><br>2. Final Exam  |
| <b>Bibliography</b>      | - Almeida, L., & Freire, T. (2008). Research Methods in Psychology and Education (5th Ed). Braga: Psiquilibrios. - Carmo, H., & Ferreira, M. (2008). Research Methodology: A Guide for self-learning (2nd Ed). Lisbon: Open University. - Thomas, J., Nelson, J. & Silverman, D. (2005). Research methods in physical activity (5th Ed). Champaign, IL: Human Kinetics.   |