ID	704
Curricular Unit	Methodology of Scientific Research in Ergonomics
Regent	Duarte Fernando da Rosa Belo Patronilho de Araújo
Learning Outcomes	Introduce the student to scientific thought. About the evolution of scientific thought in Human Kinetics. Develop the theoretical skills necessary for the practice of scientific research, through the systematic study of fundamental processes and specific strategies for planning, conducting, analyzing, interpreting and presenting the results. Mastering fundamental concepts of scientific research: problem, hypothesis, research design, 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. In general, the possible theoretical and methodological discussion of specific issues and problems in the field of Human Kinetics.
Syllabus	I. Introduction 1. Research in the science of human movement 2. What is science and scientific research? 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. Wear theories (models and hypotheses), literature III. As will study 6 Choosing a methodology (types of research methods, planning, design and procedures) 7 Nature of research:.. Variables and their measurement, validity, sensitivity and fidelity 8 Representation of research:. Sampling and circumstances (context and task to investigate) 9. collect data (data types, data selection, collection types) IV. What you get 10. Describe present and explore the data (significance of data) 11. Interpret and discuss the data (generalization, explanation, pred
Evaluation	I. Continuous Assessment (implies the presence of 2/3 of the classes taught) Continuous assessment will have two parts: 1) presentation and discussion of an article of scientific research, chosen by the student and approved by the teacher and 2) submission of a project scientific research prepared by the student. Whether the selection and presentation of scientific articles, or the preparation and presentation of scientific research project, are accompanied in class as follows: • Each student presents their work and puts in question to the class. • The presentation has a maximum length of 10 'and • the student himself raises issues or questions to the class. The final grade is assigned as follows: note the selection and presentation of scientific articles (30%) + project presentation (30%) + written report of the project (40%). The project should have a maximum of 10 pages including introduction, method and references. Organization of the project: 1 - Introduction: conceptual framework

Bibliography	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.