

ID	1925
Curricular Unit	Methodology of Scientific Research
Regent	Duarte Fernando da Rosa Belo Patronilho de Araújo
Learning Outcomes	<p>To develop theoretical competences to the practice of scientific research, through the systematic study of the fundamental processes and specific strategies of planning, realization, analysis, discussion and presentation of results.</p> <p>To afford the theoretical and methodological discussion of the research questions and the problems in the Human movement domain.</p>
Syllabus	<p>I. Introduction</p> <ol style="list-style-type: none"> 1. Research in human movement science 2. What is science and scientific research. 3. Ethics in scientific research <p>II. Starting research</p> <ol style="list-style-type: none"> 4. To choose a topic or a problem to research: the questions, the research aims and the means to answer to these questions. 5. How to use theories and models, and how to conduct a literature review. <p>III. How to study the selected topic</p> <ol style="list-style-type: none"> 6. To chose a method 7. The nature of the research: variables and its measurement, validity, reliability and sensibility. 8. Representative design: Sampling participants and sampling contexts 9. Data collection <p>IV. Obtained results</p> <ol style="list-style-type: none"> 1. Describe, present and explore data 2. Interpret and discuss results <p>V. To communicate the research process</p> <ol style="list-style-type: none"> 3. To write a research project 4. Publish the work on scientific journals

The teaching is both theoretical and practical. The contents are presented applied to concrete cases of research in the domain of human movement, which in turn are implemented in a research project about a topic selected by the student.

Assessment

Students need to realize a research project, according with their own interests. The written report should have a maximum of 10 pages including introduction,

The project should be organized as follows:

1.- Introduction: Theoretical rationale under the domain of the Master (post-graduation), description of the aims of the study, and hypothesis formulation;

2.- Method:

2.1.- Sample;

2.2.- Material: description of the documents, tools, equipment etc. used for assessment;

2.3.- Procedures;

3.- References in APA format (6th Edition);

The reports should be delivered in a digital format digital (or optionally in paper).

Evaluation

Bibliography

- Almeida, L., & Freire, T. (2008). Metodologia da Investigação em Psicologia e Educação (5th Ed). Braga: Psiquilibrios.
- Carmo, H., & Ferreira, M. (2008). Metodologia da investigação: Guia para auto-aprendizagem (2nd Ed). Lisboa: Universidade Aberta.
- Nestor, P., & Schutt, R. (2012). Research Methods in Psychology: Investigating Human Behavior. London: Sage.
- Thomas, J., Nelson, J. & Silverman, D. (2005). Research methods in physical activity (5th Ed). Champaign, Il: Human Kinetics.