![ipb INSTITUTO POLITÉCNICO DE BRAGANÇA]

Course Unit	Environmental Education Research
Bachelor in	Environmental Education

Field of study	-	
School	School of Education	

Academic Year	2023/2024	Year of study	2	Level	1-2	ECTS credits	8.0
Type	Annual	Semester	-	Code	9082-768-2002-00-23		

Workload (hours)	216	Contact hours	T	-	TP	72	PL	-	TC	-	S	-	E	-	OT	18	O	-

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s)	Maria do Céu Ribeiro

Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:
1. Acquire concepts and methodological aspects of instrumentation, data collection, data analysis and interpretation in studies of a qualitative or quantitative nature;
2. Develop research projects and research reports;
3. Perform data processing, qualitative and quantitative, using appropriate computer resources;
4. Present results and conclusions from an investigation.

Prerequisites

Before the course unit the learner is expected to be able to:
Not applicable

Course contents

1. Scientific research. 2. Planning and design of a research. 3. Scales of measurement. 4. Processing and interpretation of data.

Course contents (extended version)

1. Scientific research
   - Basic concepts in research
   - Importance of the scientific research
   - Ethical questions in research
   - Paradigms of research
   - Methods of research
   - Classification of research
2. Planning and design of a research
   - Construction and discussion of research projects
   - Definition of the problem
   - Literature review
   - Research methodology
   - Research results
   - Conclusion of the research
   - Research report
3. Scales of measurement
   - Structure of the measurement process
   - Variables
   - Types of scales of measurement of variables and their properties
4. Processing and interpretation of data
   - Data: Qualitative and quantitative
   - Techniques for data collection
   - Samples and its characterization
   - Content analysis
   - Organization, interpretation and presentation of data
   - Use of appropriated computing resources (Excel, NVivo, SPSS)

Recommended reading

1. Bardin, L. (2018). Análise de conteúdo (4. ª Ed.). Edições 70.
2. Coutinho, M. (2022). Metodologia de investigação em ciências sociais e humanas, teoria e prática (Reimpressão). Almedina.
3. Creswell, J. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th Ed.). SAGE Publication Ltd.
4. Marconi, M. , & Lakatos, E. (2017). Metodologia científica (7. ª Ed.). Editora Atlas.
5. Pestana, M. , & Gageiro, J. (2014). Análise de dados para ciências sociais. A complementaridade do SPSS. (6. ª Ed.). Edições Sílabo.

Teaching and learning methods

Exploration of themes using active learning methodologies, including project-based learning and problem-based learning. Preparation of reports or research papers. Discussion of topics in small or large groups. Individual work or collaborative work. Resolution of consolidation tasks of the topics covered in the course.

Assessment methods

1. Continuous assessment - (Regular, Student Worker) (Final)
   - Intermediate Written Test - 60% (Two summative written tests)
   - Work Discussion - 40% (Implementation and discussion of de proposed tasks or individual or group works)
2. Assessment by examination - (Regular, Student Worker) (Supplementary, Special)
   - Final Written Exam - 100% (Written test about course contents)

Language of instruction

Portuguese, with additional English support for foreign students.

Electronic validation

Maria do Céu Ribeiro	Graça Margarida Medeiros Teixeira e Santos	Adorinda Maria Rodrigues Pereira S. Gonçalves	Carlos Manuel Costa Teixeira
13-02-2024	13-02-2024	14-02-2024	18-02-2024