

Course Unit	Research Methods in Pharmacy		Field of study	-	
Bachelor in	Pharmacy		School	School of Health	
Academic Year	2023/2024	Year of study	3	Level	1-3
Type	Semestral	Semester	2	ECTS credits	5.0
Code	9549-803-3204-00-23				
Workload (hours)	135	Contact hours	T -	TP 45	PL -
			TC -	S 7,5	E -
			OT 15	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) Isabel Cristina Jornalo Freire Pinto

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. GENERALS: Recognize the research process in health: the epistemologies, methodological, technical and ethical aspects, in articulation theoretical/empirical field, in the practical clinical one
2. Elaborate a Project of Research in the field of Pharmacy, Medicines or Health products
3. Develop a systematic literature review in the field of Pharmacy, Medicines or Health products
4. SPECIFICS: Recognize the need of analyze a critical appreciation of research in the field of Pharmacy, Medicines or Health products
5. Knowing develop a critical appreciation of the types of research instruments and their suitability for particular research questions in the field of Pharmacy, Medicines or Health products
6. Know the inherent elements to the instrumental and methodological plan of a research
7. Be able to perform all steps of the Research Planning, Execution and Publication
8. Be able to present in oral and written form the developed work

### Prerequisites

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

### Course contents

History of the development of the human sciences. Steps of the scientific method. Scientific method and scientific research. The investigation process. Classification and Research Types .Construction of a Research Project. Phases and Stages of the Research Process. Disclosure and reporting the results of an investigation. Academic and Scientific Works.

### Course contents (extended version)

1. History of the development of the human sciences. Knowledge acquisition methods
2. Scientific method and scientific research. Steps of the scientific method.
3. The investigation process: Investigation Classification; Types of Investigation
4. Construction of a Research Project. Phases and Stages of the Research Process:
  - Conceptual phase: Theme; Problem or question of departure; Literature review; Hypotheses
  - Methodological Phase: Design; Population and Sample; Variables; DCI; Data analysis; Ethical issues
  - Empirical Phase: Collection and processing of data, Discussion and Dissemination of results
5. Disclosure and reporting the results of an investigation. Academic and Scientific Papers:
  - Search work
  - Research Report
  - Scientific Article
  - Scientific Poster
  - Oral Communication

### Recommended reading

1. Fortin M. F. (2003). O Processo de Investigação - da Conceção à realização. 3ª Ed. Lusociência, Outubro. ISBN: 972-8383-10-X.
2. Pestana, H. ; Gageiro, J. N. (2008). Análise de dados para Ciências Sociais. A complementaridade do SPSS. 5ª Ed. Lisboa: Edições Sílabo
3. Ribeiro, J. L. P. (2010). Metodologias de Investigação em Psicologia e Saúde. 3ª Ed. Oliveira de Azemeis. Lipsic.
4. www. webofknowledge. com; <http://www.ncbi.nlm.nih.gov/pubmed>; [www.bibliotecadigital.ipb.pt](http://www.bibliotecadigital.ipb.pt)

### Teaching and learning methods

Theoretical-practical Lessons: exhibition and interactive methodology; practical application of the methods and techniques of research in the field of Pharmacy; OT Lessons: guidance and monitoring stages of the research works; Seminar Lessons: presentation of research works.

### Assessment methods

- Review Paper + Research Project - (Regular, Student Worker) (Final, Supplementary, Special)
- Development Topics - 50% (Literature Systematic Review paper (PT, EN) - 50%; Applies minimum score of 8.5 points)
- Projects - 50% (Research Project - 25% Oral, 25% Writing. Minimum score of 8.5 - Pedagogical Regulation)

### Language of instruction

1. Portuguese
2. Portuguese, with additional English support for foreign students.

### Electronic validation

Isabel Cristina Jornalo Freire Pinto	Olívia Rodrigues Pereira	Luis Migue Fernandes Nascimento	Adília Maria Pires da Silva Fernandes
27-03-2024	03-04-2024	04-04-2024	07-04-2024