

**Información del Plan Docente**

<b>Academic Year</b>	2016/17
<b>Academic center</b>	127 - Facultad de Ciencias de la Salud
<b>Degree</b>	548 - Master's in Nursing Studies
<b>ECTS</b>	9.0
<b>Course</b>	1
<b>Period</b>	First semester
<b>Subject Type</b>	Compulsory
<b>Module</b>	---

**1.Basic info****1.1.Recommendations to take this course****1.2.Activities and key dates for the course****2.Initiation****2.1.Learning outcomes that define the subject****2.2.Introduction****3.Context and competences****3.1.Goals****3.2.Context and meaning of the subject in the degree****3.3.Competences****3.4.Importance of learning outcomes****4.Evaluation****5.Activities and resources****5.1.General methodological presentation**

The academic program of the Advanced Research Techniques course, has been developed taking into account the purpose of ensuring the acquisition of the competencies described in the title. To do this, we have designed a program consisting of 18 thematic units, which will be taught through a combination of lectures and practices, enabling students enrolled in the subject, acquire the expected learning outcomes.

In this sense, the learning methodology proposed is rooted in critical rationalism and constructivism, in which based on

previous experience and knowledge of students, is designed to give significance to the new through a dialogic process intra- and inter-subject, in which the theoretical and practical aspects of research converge in a continuum of the same reality.

## **5.2.Learning activities**

1. Lectures.

2. Practical classes.

## **5.3.Program**

Unit 1. The logic of clinical research. Classic research paradigms. Stages of the research process.

Unit 2. Scientific writing.

Unit 3. Ethical considerations in clinical research. The clinical research ethics committees. The CEICA in the autonomous community of Aragon.

Unit 4. Data management fieldwork. Definition and categorization of variables. Concept maps in clinical research.

Unit 5. Precision, accuracy, validity and reliability in clinical studies. Random errors and biases. Analysis of confusion.

Unit 6. Critical analysis of literature. Scientific evidence and recommendations for clinical practice.

Unit 7. General characteristics of epidemiological studies. Descriptive epidemiological studies.

Unit 8. Analytical observational studies.

Unit 9. Clinical trials.

Unit 10. Study designs of medical tests.

Unit 11. Designs sampling and determination of sample sizes in scientific studies.

Unit 12. Planning and information gathering. Quality assurance data.

Unit 13. Analysis of quantitative data: Descriptive statistics.

Unit 14. Analysis of quantitative data: Hypothesis Tests.

Unit 15. Multivariate analysis: experimental designs, regression models and logistic regression.

Unit 16. Introduction to other multivariate models. Factorial analysis.

Unit 17. Summary and writing results.

Unit 18. Publication of research papers in scientific journals. Bibliometric indices magazines.

#### **5.4.Planning and scheduling**

Lectures and practices will take place on Thursday and Friday in the morning or afternoon, according to the sequential and time distribution by the coordination of the University Master of Introduction to Research in Nursing Science

#### **5.5.Bibliography and recommended resources**