

**Research Practices**

Code: 44422  
ECTS Credits: 15

Degree	Type	Year	Semester
4312326 Applied Clinical Research in Health Sciences	OB	0	2

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

**Contact**

Name: Xavier Bonfill Cosp  
Email: Xavier.Bonfill@uab.cat

**Use of Languages**

Principal working language: spanish (spa)

**Teachers**

Guadalupe Esteve Pardo  
Maria Montserrat Martín Baranera  
Maria Teresa Puig Reixach  
Rosa María Antonijoan Arbós  
Francesc Xavier Castells Oliveres  
María Montserrat Ferrer Fores  
Antonio Pascual Lopez  
Joaquin Lopez Contreras Gonzalez  
Ivan Sola Arnau  
María Jesús Quintana Ruíz  
Ignasi Bolibar Ribas  
Gerard Urrutia Cuchi  
Clara Selva Olid

**Prerequisites**

To have passed the module "Basic Methodology in Clinical Research" and at least one elective module.

**Objectives and Contextualisation**

To get involved with an experienced research group to acquire the most important research skills related to the research work that will be carried out.

**Competences**

- Act respecting the Independent Ethics and legal aspects of the research and of the professional activities.

- Communicate and apply knowledge to the public and cultural debate.
- Covering demonstrate the importance and limitations of scientific and translational research in health sciences.
- Critically evaluate, identify and classify the sources of scientific information according to the type of evidence and the scientific relevance.
- Development of habilidades autoaprendizaje y su formación Motivación to continue to postgraduate level.
- Development scientific knowledge, creativity and Critical Thinking.
- Formulating problems, hypotheses and research objetivos.
- Identify and comprender the continuos advance and looking retos
- Prove that the methodologies covering estadísticas básicas utilizadas in the biomedical and clinical estudios y análisis use the tools of the modern computational technology.
- Recognize and explain the ethical, regulatory and financial context in which biomedical research must be conducted
- Working as part of a group along with other professionals, understand their views and cooperate constructively.

## Learning Outcomes

1. Act respecting the ethical and legal aspects of research and professional activities.
2. Collect scientific information and classify it according to levels of evidence and scientific relevance.
3. Communicate and apply knowledge to the public and cultural debate.
4. Describe the ethical basis to govern research in health sciences.
5. Describe the existence and usefulness of informed consent.
6. Describe the importance of the group as a means of research and methodological and budgetary constraints of any investigation.
7. Describe the main sources of funding for research in health sciences.
8. Develop scientific knowledge, critical thinking and creativity.
9. Develop self-learning skills and motivation to continue their education at the graduate level.
10. Fluently use medical information databases such as MEDLINE, PUBMED, or ISI WEB KNOWLEDGE.
11. Formulate working hypotheses, research objectives and plan a research project in health sciences.
12. Identify and understand the ongoing progress and challenges in search
13. Identify the needs of translational research in the field of health sciences where research practices are developed.
14. Manage software packages: enter data into the corresponding bases and analyzed with scientific / statistical methods appropriate.
15. Working as part of a group along with other professionals, understand their views and cooperate constructively.

## Content

The objective of this module is to apply the methodology developed during the course to the field of study chosen by the student and agreed upon with the director, and endorsed by the supervisor. Applied and pragmatic research will be prioritized with the possibility of obtaining short-term results and always following standards of best ethical and methodological practice.

## Methodology

The student will have to define and agree with the course coordinator a proposal for TFM (Master's Degree final project) and an associated internship period to carry out the project.

The student will have to develop a study protocol and present it publicly. The protocol will set up the base of the research internship and the TFM. Logistics and timeline of the internship will be agreed upon with the supervisor, who will have previously assumed responsibility for it. In the case the supervisor belongs to a non-UAB center, a pertinent agreement needs to be formalized.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Learning in action: designing and developing a research project in one specific line within a department of the UAB Faculty of Medicine and under the supervision of the director of the chosen line of research.	300	12	1, 3, 6, 4, 7, 5, 8, 9, 11, 12, 13, 14, 2, 15, 10
Type: Autonomous			
Individual study	73	2.92	1, 6, 5, 8, 9, 13, 14, 2, 15, 10

## Assessment

The supervisor of the internship will evaluate the performance and the results of the student at the end of the internship.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Assessment of the learning work by the tutor/director from work	50%	1	0.04	1, 3, 6, 4, 7, 5, 8, 9, 11, 12, 13, 14, 2, 15, 10
Assessment of written work (presentation and content) by tutor/director	50%	1	0.04	1, 3, 6, 4, 7, 5, 8, 9, 11, 12, 13, 14, 2, 15, 10

## Bibliography

Bunge M. 2004. La investigación científica. 3ª ed. Siglo XXI editores.

Eyssautier De La Mora M. 2006. Metodología de la investigación: desarrollo de la inteligencia. 5ª ed. Thomson Editores.

Icart Isern MT, Pulpón Segura AM. 2012. Cómo elaborar y presentar un proyecto de investigación, una tesina y una tesis. Editorial Barcelona: Publicacions i Edicions de la Universitat de Barcelona.

Medawar PB. 2011. Título: Consejos a un joven científico. Editorial Barcelona: Publicacions i Edicions de la Universitat de Barcelona.

Münch L, Ángeles E. 2011. Métodos y técnicas de investigación. 4ª ed. Trillas editores.

Namakforoosh MN. 2005. Metodología de la investigación. 2ª ed. Limusa editores.

Tamayo M. 2004. El proceso de la investigación científica: incluye evaluación y administración de proyectos de investigación. 4ª ed. Limusa editores.

Link to the research work regulations:

<https://www.uab.cat/web/estudiar/l-oferta-de-masters-oficials/informacio-general/investigacio-clinica-aplicada-en->

## **Software**

Microsoft Teams