

**Master's Degree Dissertation**

Code: 44423  
ECTS Credits: 15

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

**Contact**

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**Use of Languages**

Principal working language: spanish (spa)

**Teachers**

Ignacio José Gich Saladich  
Maria Montserrat Martín Baranera  
Maria Teresa Puig Reixach  
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

**Prerequisites**

Have passed the Basic Methodology module in clinical research and at least one optional module and the practi

**Objectives and Contextualisation**

To produce a detailed report resulting from the application of the knowledge gained during the Master's course in the usual format of scientific publications prepared to be defended before an evaluation panel.

**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.
- Communicate effectively and clearly, both orally and in writing, justifications, results and conclusions of the investigation.

- 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 comprehend the continuos advance and looking retos
- Maintain and update their scientific skills, with particular emphasis on learning autonomously new knowledge and techniques in the field of health sciences and other areas of biomedicine.
- Participate in the development of a protocol for basic, clinical or experimental research, based on scientific methodology.
- 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. Analyze data from a research project with the proper scientific methodology, collect results, conclusions and define constraints.
3. Communicate and apply knowledge to the public and cultural debate.
4. Describe the advances in medical research and its implications in the design of research protocols.
5. Designing a research project.
6. Develop scientific knowledge, critical thinking and creativity.
7. Develop self-learning skills and motivation to continue their education at the graduate level.
8. Formulate hypotheses and research objectives within a consolidated research line.
9. Identify and understand the ongoing progress and challenges in search
10. Manage complex software packages.
11. Manage informed consent for biomedical research.
12. Use the ethical bases in the research project - Master's Dissertation- you are developing.
13. Work independently and autonomously in the process of research in the field of health and / or biomedicine.
14. Working as part of a group along with other professionals, understand their views and cooperate constructively.
15. Write a report and / or scientific publication of a research using scientific terminology and defend it orally.

## Content

The research project should include:

Introduction: Based on an extensive and rigorous review of the scientific literature.

Objectives: The general and specific objectives of the project will be clearly defined.

Methodology: Specification of the methodology applied. Details related to study design, variables used and data analysis will be provided.

Results: Obtained after applying the described methodology following the predetermined protocol.

Discussion: Assessment of the results obtained with relation to the previous knowledge pointing out strengths and limitations, as well as future lines of investigation.

Conclusions: Related to the objectives formulated and based on the results obtained.

Bibliography: Bibliographical references presented in standardized formats.

## Methodology

The student will carry out his/her TFM applying the knowledge and skills acquired during the Master's course under the management of the corresponding director and with the supervisor's guidance.

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                     |       |       |  |
| Tutorials and oral presentations     | 75    | 3     | 1, 2, 3, 4, 7, 5, 8, 9, 11, 10, 15, 14, 13, 12 |
| Type: Autonomous                     |       |       |  |
| Preparation and preparation of works | 298   | 11.92 | 1, 2, 3, 4, 7, 5, 8, 9, 11, 10, 15, 14, 13, 12 |

## Assessment

The TFM will be presented and defended in a public session and will be graded by an ad hoc panel of lecturers on the Master's course and of researchers and additional professors of the topic in question if necessary.

## Assessment Activities

| Title   | Weighting | Hours | ECTS | Learning Outcomes                                 |
|---|-----------|-------|------|---|
| Assessment of written work (presentation and content)                                 | 50%       | 0.5   | 0.02 | 1, 2, 3, 4, 6, 7, 5, 8, 9, 11, 10, 15, 14, 13, 12 |
| Oral presentation of the research work before a court made up of three doctor members | 50%       | 1.5   | 0.06 | 1, 2, 3, 4, 7, 5, 8, 9, 11, 10, 15, 14, 13, 12    |

## 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