



# **Degree-Final Project**

Code: 102926 ECTS Credits: 6

| Degree           | Туре | Year | Semester |
|------------------|------|------|----------|
| 2502442 Medicine | ОВ   | 6    | 0        |

### Contact

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### **Teachers**

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## **Use of Languages**

Principal working language: catalan (cat)

Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

## **Prerequisites**

- Students taking this subject must have successfully completed 240 ECTS and have approved the subjects of the first 2 years of Medicine.
- In order to take this subject, it is recommended to have passed the subject "Preventive Medicine and Public Health"

# **Objectives and Contextualisation**

The purpose of this subject is to formulate a problem or research question identifying the different components of the statement:

- To perform a bibliographic review on the scientific evidence that exists on the chosen research problem.
- To write the background or theoretical framework, the scientific basis of the research question.
- To formulate the hypothesis and the research objectives.
- To justify the utility and application of search results.
- To Identify the ideal methodology to achieve the objectives of the research.
- Consider the possible ethical conflicts.
- Prepare a work plan with a timeline that ensures that the research project is viable in time.
- Define the research team and estimate the budget.

### Competences

- Be able to work in an international context.
- Communicate clearly, orally and in writing, with other professionals and the media.
- Convey knowledge and techniques to professionals working in other fields.

- Critically assess and use clinical and biomedical information sources to obtain, organise, interpret and present information on science and health.
- Demonstrate a sufficient command of English, both oral and written, for effective scientific and professional communication.
- Demonstrate basic research skills.
- Demonstrate understanding of basic statistical methodologies used in biomedical and clinical studies and use the analytic tools of modern computational technology.
- Demonstrate understanding of the importance and the limitations of scientific thought to the study, prevention and management of diseases.
- Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- Design and manage programmes and projects in the field of health.
- Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- Organise and plan time and workload in professional activity.
- Use information and communication technologies in professional practice.

# **Learning Outcomes**

- 1. Analyse information from experiments and clinical trials.
- 2. Be able to work in an international context.
- 3. Communicate clearly, orally and in writing, with other professionals and the media.
- 4. Convey knowledge and techniques to professionals working in other fields.
- 5. Demonstrate a sufficient command of English, both oral and written, for effective scientific and professional communication.
- 6. Demonstrate basic research skills.
- 7. Demonstrate, in professional activity, a perspective that is critical, creative and research-oriented.
- 8. Explain the principles of health demography.
- 9. Formulate hypotheses and compile and critically assess information for problem-solving, using the scientific method.
- 10. Identify suitable concepts and methodologies for developing appropriate research projects in medicine.
- 11. Identify the health needs of the population.
- 12. Identify the main experimental techniques in medicine and their usefulness to basic and applied research.
- 13. Interpret health indicators.
- 14. Interpret scientific texts and write review papers on medicine.
- 15. Interpret the results of experimental techniques in medicine.
- 16. Interpret the scientific literature and the results of scientific studies.
- 17. Maintain and sharpen one's professional competence, in particular by independently learning new material and techniques and by focusing on quality.
- 18. Obtain information from medical databases.
- 19. Organise and plan time and workload in professional activity.
- 20. Present orally a summary of the review paper.
- 21. Use information and communication technologies in professional practice.
- 22. Write a review paper on a current topic in the field of medicine.

#### Content

The students individually have to prepare a research project of which they must present a written memory\*

The following sections should be included with the contents adapted to the students are contents.

 Title and author /Background /Initial hypothesis and objectives/ Material and methods/ Work plan /Timeline/ Expected results/ Applicability/Dissemination plan/ Research team /Budget /Bibliography /Annex \* Some final project proposals will be linked to learning Service projects (ApS). These social commitment projects allow the student to train through participation in a project aimed at resolving a real need in a community and thus improve the living conditions of people or the quality of the environment (for more information http://pagines.uab.cat/)

## Methodology

The end of degree project is done individually and does not imply carrying out practical work.

Subject: the student can choose the subject of their work freely according to record of file.

The professors of the different Departments of the Faculty will provide a list of orientative areas of interest in resc.

Assignment of the tutor: each student will have a tutor who will monitor their work.

Follow-up: attendance at face-to-face or telematic (\*) tutorials is mandatory. In the case of Erasmus students, the

The tutor and students will choose the tutoring dates from among those proposed in the course calendar.

The tutor will continuously evaluate the work carried out by the student ir

The student will submit a preliminary draft of the deliveries to the tutor sufficiently in advance so that he can mak

Oral presentation: it is mandatory. During the announced calendar, students will be presenting and defending the

In the expected dates the student will make the final deliveries that will be evaluated.

Final documentation to deliver: Each student must submit to their tutor a copy in PDF of the computerized files of the written report of the work uploading it at the computer program "eina TFE", together with the support of the

\* Depending on the restrictions to face-to face activities enforced by health authorities.

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  | 8     | 0.32 | 1, 6, 8, 10, 11, 12, 13, 19   |
| Type: Autonomous   |       |      |   |
| Personal study/reading articles and reports of interest / elaboration of the reports | 134   | 5.36 | 1, 3, 5, 6, 7, 4, 8, 9, 10, 11, 12, 13, 15, 16, 14, 17, 18, 19, 20, 22, 2, 21 |

### Assessment

The evaluation of the Final Project is based on the tutor's follow-up of the student's work and on the assessment made by a committee consisting of 3 professors on the oral presentation and defence.

The TFG qualification will consist of the following components:

a. Assessment of the tutor. (0-10, 50% of the note). It evaluates the involvement, rigor and commitment of the student with the work in addition to the rubrics of each tutorial session and the final report:

The initial session (10%), The intermediate session (25%) The final session (25%) The evaluation of the memory (40%).

b. Assessment of the committee (0-10, 50% of the note). It evaluates the work done by the student himself, as well as his communication skills and the ability to defend the work presented (\*).

Conditions to calculate the final mark:

- 1. That the score of the initial evaluation session is equal to or higher than 5. In the case of a lower score the student will not be able to continue the work and their qualification will be NO EVALUATION.
- 2. Considering that the first criterion is met, the other condition is that the score of the evaluation of the final session and the evaluation of the memory is equal / higher than 5.

In the case of a lower score, The student will not be able to do the oral presentation and their qualification will be FAIL .

- 3. It will be considered if the oral presentation and defense is in English, the increase of up to 0.5 points to the final mark
- \* Students assessment may experience some modifications depending on the restrictions to face-to-face activities enforced by health authorities

### Assessment Activities

| Title                         | Weighting | Hours | ECTS | Learning Outcomes   |
|-------------------------------|-----------|-------|------|---|
| Oral defence of written works | 50%       | 1     | 0.04 | 1, 3, 5, 6, 7, 4, 8, 9, 10, 11, 12, 13, 15, 16, 14, 17, 18, 19, 20, 22, 2, 21 |
| reports and written work      | 50%       | 7     | 0.28 | 1, 3, 5, 6, 7, 4, 8, 9, 10, 11, 12, 13, 15, 16, 14, 17, 18, 19, 22, 2, 21     |

# **Bibliography**

The end-of-degree project does not have a specific bibliography although the texts can be consulted as general references on the philosophy of the TFG:

- 1. Báez y Pérez de Tudela J. Investigación cualitativa. Madrid: Esic; 2007.
- 2. Argimon JM, Jiménez J. Métodos de investigación clínica y epidemiológica. 4a de. Barcelona:Elsevier; 2013.
- 3. Delgado M, Doménech JM, Llorca J. Metodología de la investigación sanitaria. Barcelona: Signo; 2004.
- 4. Denzin NK, Lincoln YS. Manual de investigación cualitativa. Barcelona: Gedisa; 2011.
- 5. Macklin, R. La ética y la investigación clinica. Barcelona: Fundació Victor Grífols i Lucas, DL; 2010.
- 6. Ruiz Olabuénaga Jl. Metodología de la investigación cualitativa. 4a ed. Bilbao: Universidad de Deusto; 2007.
- 7. Ferrer V, Carmona M, Sorris V. El trabajo de fin de Grado. Guia para estudiantes, docentes y agentes colaboradores. Madrid: McGrawHill; 2013
- 8. CONSORT (ConsolidatedStandards of ReportingTrials). http://www.consort-statement.org/index.aspx?o=1031
- 9. Analysis of diagnostic tools: follow STARD (Standards for Reporting of Diagnostic Accuracy)
- 10. Chan AW, Tetzlaff JM, Altman DG, Laupacis et al. SPIRIT 2013 Statement: defining standard protocol items for clinical trials. Rev PanamSaludPublica. 2015;38(6):506-14.
- 11. Stroup DF, Berlin JA, Morton SC, et al.. Meta-analysis of observational studies in epidemiology: a proposal for reporting. Meta-analysis Of Observational Studies in Epidemiology (MOOSE) group. JAMA. 2000 Apr 19;283(15):2008-12. Review
- 12. Vallvé C, Artés M, Cobo E; TREND group. [Non-randomized evaluation studies(TREND)]. Med Clin (Barc). 2005;125Suppl 1:38-42. Spanish
- 13. Von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, VandenbrouckeJP;STROBE Initiative. The Strengthening the Reporting of Observational Studies inEpidemiology (STROBE) statement: guidelines for reporting observational studies. JClinEpidemiol. 2008 Apr;61(4):344-9
- 14. Schulz KF, Altman DG, Moher D; CONSORT Group. CONSORT 2010 statement: updated guidelines for reporting parallel group randomised trials. Int J Surg.2011;9:672-7
- 15. Brooke BS, Ghaferi AA, Kibbe MR. Effective use of reporting guidelines to improve the quality of surgical research. Jama Surg. 2021; 156: 515-516

### Software

Power point

Eina TFE