

STUDENT GUIDE

MODULE:

Master's Final Project

Coordinator: Dr. Josep M. Tormos Muñoz

jmtormos@guttmann.com

UAB Code: 44139

Modality: mandatory

9 ECTS

2nd semester 2020-2021

Objective

This module aims to highlight the integration of the competences acquired by the student during his training program. The students will develop an original project in the field of Neurorehabilitation that will integrate the professional components with the research that must allow them to build new knowledge about the treatment and rehabilitation of people with neurological disabilities.

Workload

9 ECTS: equivalent to 225 hours of student work, of which 100 h are on-site and will be distributed among seminars, tutorials, compilation of data and participation in the assistance and research activities linked to the study of the Master's Final Project.

The teaching methodology and the proposed evaluation may undergo some modification depending on the restrictions on attendance that the health authorities impose.

Teaching methodology

The teaching methodology and the proposed evaluation may undergo some modification depending on the restrictions on attendance that the health authorities impose.

Competences and learning outcomes

E01 Demonstrate an advanced mastery of knowledge and technologies in Neurorehabilitation, as well as techniques of cure and patient care to improve the quality of life of people affected by a disability of neurological origin.

E029 Carry out a physiopathology analysis and assessment of an altered function and identify different diagnostic and therapeutic intervention alternatives.

E02 Analyze the causes and physical, psychological and social consequences of neurological disability.

E02.16 Prepare an intervention proposal, based on knowledge identified in the literature, to improve knowledge about neurological disability, or improve the functional capacity of patients, from a biopsychological perspective.

E03 Perform and interpret the explorations and apply the advanced techniques that allow the diagnosis and definition of therapeutic strategies in Neurorehabilitation.

E03.13 Identify strategies and methodologies that allow a more objective and systematic assessment of therapeutic and diagnostic interventions in Neurorehabilitation.

E04 Apply the knowledge in Neurorehabilitation to solve problems about the treatment and specialized rehabilitation of people with acquired brain injury, as well as the complications of their pathology.

E04.17 Identify strategies and methodologies that allow the development of new interventions (therapeutic and diagnostic in Neurorehabilitation), intensifying the level of the grade of efficiency achieved.

E05 Use the necessary methodological bases plan, design and develop research projects oriented to the clinical practice of Neurorehabilitation that generate new knowledge in this field.

E05.10 Collect, analyze and evaluate data information and generate new knowledge about neurorehabilitation processes.

E05.11 Suggest and design relevant research projects.

E05.12 Interpret the results obtained, discuss them and draw coherent conclusions that draft scientific texts related to the research carried out.

Transversal Competences

- GT01 Analyze, synthesize and make decisions by reasoning critically about the different professional actions.
- GT02 Propose work protocols through information research in the scientific literature.
- GT03 Work according to professional ethics and responsibility.
- GT04 Integrate into multidisciplinary teams in diverse cultural and scientific environments, creating and maintaining a climate of open collaboration and teamwork.

Work plan

1. In the first quarter of the course there will be a seminar on clinical research in Neurorehabilitation where the different study proposals that are being made in the Institut Guttman will be presented and to which the students can direct their interest to do the final Master's Project (TFM).
2. Each student will maintain a prior tutorial of the TFM with the Module Coordinator. To agree on the day and time of tutoring, the annual calendar will be posted on the Master's website with the availability of contact hours and data. In these tutorials a tutor expert in the subject that you want to develop will be appointed
The tutorials can be both in person and online. It is recommended to have a follow-up tutoring every month, although both the tutor and the student can request interviews and tutoring meetings whenever they think that it is necessary.

Components of the TFM

The TFM Will consist of three parts:

- 1) Review of the function related to the clinical problem to be addressed:**
 - Deadline for delivery January 31st
 - It will represent 20% of the Final Grade
 - The evaluation will be carried out jointly by the TFM Tutor and the Coordinator of the subject
- 2) Bibliographic review on the neurological problem addresses**
 - Deadline for delivery March 31st
 - It will represent 20% of the Final Grade
 - The evaluation will be carried out jointly by the TFM Tutor and the Coordinator of the subject
- 3) Final Project:**
 - a) Research project proposal**
 - b) Clinical program proposal**
 - Deadline for delivery May 31st
 - It will represent 60% of the Final Grade
 - The evaluation will be carried out by three doctor professors from among the professors of the cloister

Guidance for the development of each component of the TFM

1. Review of the function related to the clinical problem to be addressed:

- 1.1. Study of the anatomical and physiological bases, in manuals of neuroscience and physiology.
- 1.2. Study of bibliographic reviews.
 - It is recommended to use conceptual map structuring tools (XMIND, or similar) to structure and order the information, with links to references and articles in PDF or other formats.
 - The student must present a WORD document of no more than 20 pages excluding the bibliography, following the "Rules for preparing and presenting the Final Master's Project" that are detailed in a later point in this document.
 - The student must send their tutor the concept map (if they have used it) and the WORD document before **January 31st, 2021**.
 - Within 10 days after delivery, the student must defend the current status of their work before the tutor through a PowerPoint presentation of no more than 10 minutes.

The evaluation of this Work: conceptual map, WORD and presentation, will represent 20% of the Final Grade.

2. Bibliographic review on the neurological problem that will include:

- 2.1. Epidemiology
 - 2.2. Etiology
 - 2.3. Pathophysiological mechanisms
 - 2.4. Main diagnostic strategies
 - 2.5. Rehabilitation treatment most used in previous disorders.
- It is recommended to use conceptual map structuring tools (XMIND, or similar) to structure and order the information, with links to references and articles in PDF or other formats.
 - The student must present a WORD document of no more than 20 pages excluding the bibliography, following the "Rules for preparing and presenting the Final Master's Project" that are detailed in a later point in this document.
 - The student must send their tutor the concept map (if they have used it) and the WORD document before **March 31st, 2021**.
 - Within 10 days after delivery, the student must defend the current status of their work before the tutor through a PowerPoint presentation of no more than 10 minutes.

The evaluation of this Work: conceptual map, WORD and presentation, will represent 20% of the Final Grade.

3. Final project

There are two options to develop the Final Master's Project:

a) Research Project proposal:

1. Title
 2. Summary
 3. Background
 4. Objectives
 5. Hypothesis
 6. Methodology
 7. Expected results
 8. Critical appraisal and conclusions of the learning process
 9. Bibliography
 10. Annexes
- b) Design of a clinical program to incorporate the intervention.**
1. Title
 2. Summary
 3. Background
 4. Objectives
 5. Nivel de evidencia de la propuesta o propuestas
 6. Methodology and response assessment instruments
 7. Expected results and response or efficacy criteria
 8. Critical appraisal and conclusions of the apprenticeship process
 9. Bibliography
 10. Annexes

Rules for preparing and presenting the Final Master's Project

- The projects must be delivered on WORD and PDF
- All documents must contain:
 - Identification data: Master's name and edition, title of the Final Master's Project, name of the author and tutor's delivery date
 - Contents index, which allows an assessment of the extension and depth of the workThese two sheets are also excluded from the 30 pages that the project must have.
- Project content
 - It Will be presented in WORD and PDF, with Calibri font, 11 points, 1,15 line spacing.
 - It is recommended to use the editing resources of the WORD processor to facilitate the agile and light reading of the document.
 - The possibility of appending information (duly indexed and formatted) is also contemplated, beyond the recommended extension in each exercise, that is clearly related to the project, but it is not essential for its understanding, and that allows to illustrate the project developed by the student, until reaching the final document.
- The final version in WORD and PDF Will be sent via e-mail to docencia@guttmann.com, before the indicated dates.

Competences evaluation

- The evaluation of the Master's Final Project will be based on the matrix of rubrics that will be published in the Guttmann e-learning Platform.
- As a whole, the progression in the performance of the work and the acquisition of innovation skills and attitudes will also be taken into account. That is why the progress reports that the tutors make after each tutoring will be assessed, as well as the final version of the map or concept maps and the preliminary presentations.
- The presentation and public defense of the Master's Thesis is an academic act of evaluation. The student will have a maximum of 15 minutes to present and 10 to defend his project, during which he will have to prioritize those issues that he considers most relevant to his work and make a clear, precise and complete synthesis (justification, objectives, proposal). Once their argument is finished, the members of the court may make observations, comments and questions that the student will have to answer to defend their project.
- The convocatory of defense of the Master's Final Project will be made public in the academic calendar of the Master. There will be a call at the end of June / beginning of July. The days of presentation of the Master's Final Project are considered to be academic, therefore, the attendance is compulsory for the students.
- If you do not present the Project, the subject will be "not evaluable". The qualification of not evaluable in the final evaluation reports implies exhausting the rights inherent to the module's enrolment.
- You will pass the subject if you obtain a minimum score of 5 points (scale 0-10).

Procedure and recovery criteria

The re-evaluation is a process that will be put into operation once the period of publication of the final grades has ended.

- You will be entitled to a re-evaluation if you have obtained between 3.5 and 4.9 in the average grade of the subject.
- The test submitted to the re-evaluation process may not exceed 5.0 point (approved) in the final grade.

The module's web

At E-learning-Guttmann, students and teachers have access to the module content:

- Teacher guides and programs. In this folder are the teaching guides, in Catalan and Spanish, of the module and the curriculum detailing the subjects, the teaching staff who will teach them and the class schedules.
- Module forum. In the forum students can maintain contact with teachers and other classmates, to make suggestions, ask and solve questions, etc.

Satisfaction surveys

It is very important that students send us your comments, complaints and suggestions regarding the module. That's why we put t your disposal two evaluation surveys. The surveys are anonymous.

Coordination

For any aspect of the organization and the module temary you can contact

Dr. Josep M. Tormos Muñoz

Research Director

Doctor in Medicine. Teacher hired doctor

Institut Guttmann – UAB

Email: jmtormos@guttmann.com

RECOMMENDED BIBLIOGRAPHY

- Six things to do before writing your manuscript. Part 1
 - <https://www.elsevier.com/connect/six-things-to-do-before-writing-your-manuscript>
- 11 steps to structuring a science paper editors will take seriously. Part 2
 - <https://www.elsevier.com/connect/11-steps-to-structuring-a-science-paper-editors-will-take-seriously>
- Writing the first draft of your science paper — some dos and don'ts. Part 3
 - <https://www.elsevier.com/connect/writing-a-science-paper-some-dos-and-donts>
- How to make your article easy to review. Part 4
 - <https://www.elsevier.com/authors-update/story/peer-review/how-to-make-your-article-easy-to-review-part-4>
- English communication for scientists
 - <https://www.nature.com/scitable/ebooks/english-communication-for-scientists-14053993/contents>