MASTER THESIS OUTLINE

(1) GENERAL

SCHOOL	School of Medicine		
ACADEMIC UNIT	School of Medicine		
LEVEL OF STUDIES	Postgraduate		
COURSE CODE	-	SEMESTER	4
COURSE TITLE	Research Diploma Thesis		
INDEPENDENT TEACHING ACTIVITIES *if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits*		WEEKLY TEACHING HOURS	CREDITS
Laboratory education and practice			30
Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).			
COURSE TYPE *general background, special background, specialised general knowledge, skills development*	Participation in the experimental part of a laboratory. The students will be educated in basic and clinical research protocols and they will contribute to lab's research by performing experimental or clinical work.		
PREREQUISITE COURSES:	All the courses of the program and rotations.		
LANGUAGE OF WRITING:	English		

(2) LEARNING OUTCOMES

Learning outcomes

The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.

Consult Appendix A

- *Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area*
- *Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B*
- *Guidelines for writing Learning Outcomes*

The dissertation is a piece of independent research supervised by a member of staff, in an area related to the MSc degree. This module allows students to choose their own subject area and a research topic of interest related to the MSc program, define the pace of work and approach, exploit their own strengths and interests by demonstrating originality and creativity.

By the end of this module, the students will be:

• able to conduct literature review and choose a research topic that has not been not adequately investigated in their area of research.

• able to learn from existing knowledge or expertise in a particular area of interest within the fields of Neurobiology, Neuropharmacology, Neurophysiology and Computational Neuroscience.

• able to apply theories, methods and principles taught in the degree program.

• able to set specific research questions and choose statistical methods to test their hypotheses, present and interpret their results.

• able to engage in scientific writing.

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology
Adapting to new situations
Decision-making
Working independently
Team work
Working in an international environment
Working in an interdisciplinary environment
Production of new research ideas
Project planning and management
Respect for difference and multiculturalism
Respect for the natural environment
Showing social, professional and ethical responsibility and sensitivity to gender issues
Criticism and self-criticism
Production of free, creative and inductive thinking
……
Others…
…….

The dissertation will help the students to advance their decision-making and project planning skills. Students will learn how to search and analyze scientific data in an interdisciplinary environment and how to produce novel research ideas. Also, they will be trained to prepare and perform experimental protocols and interpretate the results.

(3) SYLLABUS

Training in basic/clinical research protocols, experimental techniques and interpretation of the results.

(4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY *Face-to-face, Distance learning, etc.*	A dissertation of 12,000 words. Public defense with a PPT presentation. Students must submit a research proposal with title, objectives, proposed methodology, expected results, feasibility, time table and bibliography. They must have previously discussed and agreed the topic with their main supervisor.
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY *Use of ICT in teaching, laboratory education, communication with students*	The students will use online scientific databases to search for literature related to their research topic and specific programs that they may need to generate the figures of the proposal (Photoshop, Image J etc). The students will be able to communicate with their supervisors both in contact and via online communication platforms (Zoom).
TEACHING METHODS *The manner and methods of teaching are described in detail.* *Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational*	

Activity	*Semester workload*
Lab work	

visits, project, essay writing, artistic creativity, etc. *The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS*		
	Course total	
STUDENT PERFORMANCE EVALUATION *Description of the evaluation procedure* *Language of evaluation, methods of evaluation, summative or conclusive, multiple choice questionnaires, short-answer questions, open-ended questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other* *Specifically-defined evaluation criteria are given, and if and where they are accessible to students.*	The students will be graded on their overall performance during the master thesis (motivation, consistency etc), the text of the master thesis, the public presentation of their work and the discussion following the presentation.	

(5) ATTACHED BIBLIOGRAPHY

The bibliography depends on the chosen research topic. The staff member who will supervise the student will guide the student in searching the related literature.