

## MASTER THESIS

### STUDY PLAN 2022-2023

**Coordinated by Dr Josep M Llovet** Professor of Medicine, Department of Medicine, Faculty of Medicine, University of Barcelona. ICREA Professor, IDIBAPS, University of Barcelona. - Director of the Liver Cancer Program, Icahn School of Medicine at Mount Sinai (NY, USA) –

#### GENERAL INFORMATION

Subject Name	Master Thesis
Code	566668
Type	Compulsory
Teaching	Second semester
Coordinator	Prof. Josep M Llovet
Contact details	<a href="mailto:jmllovet@clinic.cat">jmllovet@clinic.cat</a>
ECTS credits	24

#### OBJECTIVES

To obtain the Master Degree the Master Thesis is compulsory (RD 1393/2007). It consists of a research project, with 24 ECTS credits, resulting from the student individual work during his/her practical training in a research laboratory.

#### EVALUATION

There will be a mid-term evaluation in December where students will have to briefly present in form of oral presentation their master thesis. Each student will have 5 minutes to introduce the topic, the working hypothesis and objectives of the research work, materials and methods that he/she is planning to use and a brief description of the expected results.

The final evaluation of the Master Thesis will take place in June. The final score of the Master Thesis will reflect the quality of the master thesis written report , oral/virtual defense and practicum assessment.

**Language:** The written report should be submitted in English and the public defense may be done in Catalan, Spanish or English.

**Deadlines:** The written report has to be submitted during the first week of June (the exact date will be announced at the start of the Master and will be published on the virtual classroom), with the tutor's approval. The public defense will take place in front of a panel of experts. The oral/virtual presentation date will be announced by the Master Secretariat.

The Master Coordination Committee will nominate the Master Evaluation Panels (constituted by professors or researchers) which will evaluate the written report as well as the oral/virtual presentation. Evaluation panels may request clarifications from the student or his/her tutor regarding the work submitted before, during and after the oral presentation.

**Written Report:** Students will have to submit a digital version of their master thesis to the master secretariat in .pdf format. The evaluation panel will take into account the quality of the written report, and whether a) the objectives are well defined, described and achieved, b) the results are clearly presented and c) the discussion includes a correct and consistent interpretation of the result. The correct citation of reference articles will also be evaluated. The written report will count 40% of the final Master Thesis score.

**Oral/virtual presentation:** Students will have defended their work in front of the Evaluation Panel. They might help themselves by using a Power Point presentation (or similar tool). Students will have **10 minutes** to present their work, and **5 minutes** for discussion with the members of the evaluation panel. Defending the master thesis in English will be a plus in the evaluation. The oral/virtual presentation will count 40% of the final Master Thesis score.

Practicum assessment: Students will undertake their practicum in a laboratory. This training, which should consist of at least 500h, will be evaluated by the tutor and will count 20% of the final Master Thesis score.

The written report should have the following sections:

1. Title page (1 page): This page should contain the research title, student's full name, affiliation (Department, Institution or Research Centre where the project is done) and the tutor's name.
2. Abstract (1/2 page)
3. Introduction (2 pages): Outlines the background of the topic and sets the research context.
4. Working Hypotheses and Objectives (1 page): This section should be concise.
5. Material and Methods (2 pages): This section should be detailed and complete. It is recommended to specify the type of study, sample size, experimental designs, patterns " *in vivo* " or " *in vitro* " (if applicable), data collection and statistical processing of the results. If appropriate, they should explain the ethical aspects of the study in this section.
6. Results (5 to 10 pages): In this section results will be described. Tables and figures and its corresponding descriptions have to be included if considered necessary.
7. Discussion (2 pages): In this section, findings should be discussed and the results should be framed in relation to the known literature in the field.
8. Conclusions (1 page): Conclusions of the research study have to be listed in this section.
9. References (2 pages): References have to be listed in this section. They have to be updated and focused on the data related to the presented project. It is recommended to avoid long collections or literature not mentioned in the project. The citation rules should follow the Vancouver style (Index Medicus).

**i** If you have been involved in a research article, this can be integrated in the "results" section

#### **Formatting guidelines for written project:**

Font: Arial or Calibri / 12pt

Language: English

Spacing: 1 or 1,5

PDF to be sent to [traslational@ub.edu](mailto:traslational@ub.edu) by the first week of June (exact date will be announced at the start of the course)

#### **Formatting guidelines for oral/virtual presentation:**

Supported with a Power Point or similar

Language: English preferred, but Catalan or Spanish will be accepted

Duration: 10 minutes (presentation) + 5 minutes (questions)

Scheduled during June (dates tbc)

Scores will be: from 5 to 6.9, "aprovat"; from 7 to 8.9, "notable" and from 9 to 10, "excel·lent". To be able to obtain an excellent with distinction, students should have a score above 9.5 and other merits that the evaluation panel and Master Coordination Committee will consider. If students do not obtain a score over 5, they have to register for the subject again. These students may choose whether they want to improve the same project they had presented or rather start a new one. If a student has published an original paper in an indexed journal as first or second author, this work will be considered equivalent to the written report associated to the Master Thesis. However, they will need to present a 1-page-document describing their contribution to the submitted paper. Articles in press will also be accepted.

Since the Master Thesis is individual, each piece of research work presented may only be submitted by a single student. A student who submits a thesis that was not written by himself/herself or who presents as his/her own any research findings (ideas, words, work) of a third party, is guilty of plagiarism. Any text, passage, excerpt, etc. from a source other than one's own must be duly and fully identified and acknowledged. Plagiarism will be penalized as stated in the Faculty's Study Regulations.

#### **/!\ Following UB regulation:**

- **Students need to pass all master subjects in order to be able to defend their master thesis.**
- **Master Thesis cannot be performed abroad.**