

Year : 2018/19

## 63109 - Master's Dissertation

### Syllabus Information

<b>Academic Year:</b>	2018/19
<b>Subject:</b>	63109 - Master's Dissertation
<b>Faculty / School:</b>	100 -
<b>Degree:</b>	572 - Master's in Quantitative Biotechnology
<b>ECTS:</b>	30.0
<b>Year:</b>	1
<b>Semester:</b>	Second semester
<b>Subject Type:</b>	Master Final Project
<b>Module:</b>	---

### General information

#### Aims of the course

Provide a test of the maturity of the student as a future researcher in Academia or Industry

#### Context and importance of this course in the degree

Final proof of maturity of the student proving to be able to solve a research problem (under supervision)

#### Recommendations to take this course

Choose one among the different research proposals which will be offered at the beginning of the academic year.

#### Learning goals

##### Competences

- To be able to design and implements experiments required to solve a given scientific problem taking into account the time and cost
- To be able to analyze critically his/her work and compare it with other results available in the Literature or used in industry
- To be able to discuss results and experimental data with experts in the area of Biotechnology

#### Learning goals

The student that successfully finishes this course

- will be able to do research (experimental, computational or modelling) with a high degree of independence and

- originality
- will apply the contents of the other courses of the master to a real research project
- will be able to communicate, orally or on paper, the results of the project to other colleagues of the same or close areas.
- will be familiar with the work at a research laboratory and/or a biotech company

## **Importance of learning goals**

### **Assessment (1st and 2nd call)**

#### **Assessment tasks (description of tasks, marking system and assessment criteria)**

Thesis: 40 % of the final grade. The memoir must have up to 60 pages, including appendices, written with a font of 11 points and margins of 2.5cm. It must be written in english and include an abstract. The structure of the memoir is not fixed but an orientative scheme to follow may be:

- Title
- Introduction
- Hypothesis and Main Objectives of the work
- Results and Discussion
- Conclusions
- Bibliography

Defense: 40% of the final grade. In this case, 60% of this part corresponds to the presentation and 40% to the defense in front of the jury.

Report from the supervisor: 20% of the final grade. The written report will consider the difficulty of the topic, originality of the student contributions, use of tools introduced during the different master courses, skills in the laboratory or the computer simulations, commitment of the student and help required during the research or the preparation of the thesis and defense.

## **Methodology, learning tasks, syllabus and resources**

### **Methodological overview**

The methodology followed in this course is oriented towards achievement of the learning objectives. The student will elaborate a Master's dissertation supervised by a researcher with whom the student will have periodic interviews to discuss the advances and/or difficulties found. At the end of the academic year the student must write a thesis containing the conclusions of their research following the guidelines above.

### **Learning tasks**

### **Syllabus**

### **Course planning and calendar**

The students will be offered a series of topics at the beginning of the academic year. After choosing one of them, the dissertation will be carried out during the academic year under the supervision of one researcher. At the end of the year the student will write a thesis and present the conclusions of the dissertation in a public defense of the results.

The students will be offered a series of topics at the beginning of the academic year. After choosing one of them the research project will be carried out during the year under the supervision of one of the researchers. At the end, the

student will write a thesis presenting the conclusions of the project and there will be a public defense of the results.

## **Bibliography and recommended resources**