

60465 - Master's Dissertation

Syllabus Information

Academic year: 2023/24

Subject: 60465 - Master's Dissertation

Faculty / School: 100 - Facultad de Ciencias

Degree: 543 - Master's in Molecular Chemistry and Homogeneous Catalysis

ECTS: 24.0

Year: 1

Semester: Annual

Subject type: Master Final Project

Module:

1. General information

The objective of the master's final project (MFP) is to apply the knowledge acquired to the development of an original research project in a line of research related to the contents of the master.

This approach is aligned with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda: SDG3 Health and well-being, SDG4 Quality education, SDG7 Affordable and clean energy, SDG9 Industry, innovation and infrastructure, SDG12 Responsible production and consumption, and SDG13: Climate action.

The development of the MFP project, as well as its production and defence, are key in the degree, since they allow the integration and practical application of the knowledge acquired in the different subjects. In addition, the general and transversal competencies of the master's program are developed in this subject.

2. Learning results

- 1- To be able to develop a research work in the field of inorganic, organometallic, organic and catalysis chemistry, as a demonstration of the competences acquired in the master's degree.
- 2- To apply the scientific methodology to produce an original research work: bibliographic search, design, planning and development of experiments, data analysis and conclusions proposals.
- 3- To know, analyse and critically use bibliographic sources in the area of study.
- 4- To apply experimental and instrumental techniques in the field of molecular chemistry and catalysis.
- 5- To be able to prepare a descriptive report of the research results obtained.
- 6- To be able to communicate and discuss with scientific rigor the results of the research work.

3. Syllabus

The development of the subject Master's Final Project involves:

Exhaustive bibliographic search.

Design, planning and development of experiments.

Assessment of results using structural characterization techniques or theoretical calculations.

Preparation of a descriptive report with the results of the research work.

Presentation and defence of the research work.

4. Academic activities

The MFP (24 ECTS) has been designed as an introductory research project directed by a researcher from the research groups participating in the master, or from other public or private research centres related to the subject of the master.

The activities planned in the development of the project will depend on its nature. They usually include bibliographic analysis, design and execution of experiments, characterization (or theoretical study) and discussion of results, writing and defence of the report.

5. Assessment system

The following aspects will be taken into account in the assessment of the MFP:

1. Written report of the work (60 %).
- 2- Presentation and defence of the work (30 %).
- 3- Report of the director of the work (10 %).

In the MFP, the scientific content of the work will be assessed, as well as the ability to analyse and summarise demonstrated by the student during the realization of the work and during the writing of the report. In the presentation and defence of the paper, the quality of the presentation and the student's ability during the presentation and defence will be assessed. Additionally, the

assessment made by the director of the work on the development of the same will be considered.
In the production and management of the MFP, the current regulations will be taken into account, in particular, the Regulations of the University of Zaragoza, the Regulations of the Faculty of Sciences and the specific Regulations established by the Quality Assurance Committee of the degree.