

**COURSE DATA****Data Subject**

Code	44427
Name	Master's final project
Cycle	Master's degree
ECTS Credits	15.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. Period year
2208 - M.D. in Molecular Nanoscience and Nanotechnology	Faculty of Chemistry	1 Annual

Subject-matter

Degree	Subject-matter	Character
2208 - M.D. in Molecular Nanoscience and Nanotechnology	11 - Master's final project	End Labour Studies

Coordination

Name	Department
CORONADO MIRALLES, EUGENIO	320 - Inorganic Chemistry

SUMMARY

Development of a research work in this area.

PREVIOUS KNOWLEDGE**Relationship to other subjects of the same degree**

There are no specified enrollment restrictions with other subjects of the curriculum.



Other requirements

There are no specified enrollment restrictions with other subjects of the curriculum.

OUTCOMES

2208 - M.D. in Molecular Nanoscience and Nanotechnology

- Students should apply acquired knowledge to solve problems in unfamiliar contexts within their field of study, including multidisciplinary scenarios.
- Students should be able to integrate knowledge and address the complexity of making informed judgments based on incomplete or limited information, including reflections on the social and ethical responsibilities associated with the application of their knowledge and judgments.
- Students should communicate conclusions and underlying knowledge clearly and unambiguously to both specialized and non-specialized audiences.
- Students should demonstrate self-directed learning skills for continued academic growth.
- Students should possess and understand foundational knowledge that enables original thinking and research in the field.
- To have the ability to develop a research team work.
- To possess the necessary knowledge and abilities to continue with future studies in the PhD program in Nanoscience and Nanotechnology.
- For students from field of knowledge (e.g. chemistry) to be able to scientifically communicate and interact with colleagues from another field (e.g. physics) in the resolution of problems laid out by the Molecular Nanoscience and Nanotechnology.
- To know the methodological approaches used in Nanoscience.
- To know the molecular nanoscience "state of the art".
- To know the state of the art in molecular nanomaterials with optical, electric and magnetic properties.

LEARNING OUTCOMES

At the end of the training-learning period, students should be able to:

- Use the scientific databases, abstracts, full articles, documentation, etc. necessary to have a full vision of previous works, originality, interest and viability of a specific study.
- Use the experimental and theoretical methods to carry out a research work in the molecular nanoscience field.
- Work in the area of application needed by a specific study, with the maximum security for the operator and the environment.



- Produce a clear and concise report about their results obtained during their research work.
- Present and defend, in front of a specialized audience, the development, results and conclusions of the research work done.
- Explain in a clear and concise way the research work conclusions that might be of interest for a non-specialized audience.
- Demonstrate, during the development of the research work and during its exposition and defense, the ability to apply the obtained research experience in the planning and execution of future studies in different scenarios within the nanoscience field.

DESCRIPTION OF CONTENTS

1. Master dissertation.

Students will carry out an initiation to research work and will defend their master dissertation.

WORKLOAD

ACTIVITY	Hours	% To be attended
Graduation project		100
Development of group work	9,00	0
Development of individual work	30,00	0
Development of a final project	300,00	0
TOTAL	339,00	

TEACHING METHODOLOGY

- Articles discussion.
- Master dissertation: experimental work, report elaboration, exposition and defence.

EVALUATION

Activities evaluation by the tutor during the Master dissertation experimental work.	10-20%
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Master dissertation report.	30-50%
Master dissertation presentation, exposition and defence.	30-50%

