

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

<b>Code</b>	44716
<b>Name</b>	Master's final project
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	22.0
<b>Academic year</b>	2022 - 2023

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. Period</b>	<b>year</b>
2226 - M.D. in Organic Chemistry	Faculty of Chemistry	1	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2226 - M.D. in Organic Chemistry	12 - Master's final project	End Labour Studies

**Coordination**

<b>Name</b>	<b>Department</b>
DEL POZO LOSADA, CARLOS	325 - Organic Chemistry

**SUMMARY**

The final aim of this subject, Final Master Assignment (22 credits), is the practical application of the acquired competences throughout the course in the different theoretical subjects.

For the realization of the experimental work, the incorporation of the students to a research group will be necessary.

This work will introduce students in the research activity in the different aspects or organic chemistry, getting in touch with the methodologies and type of work related to a research laboratory.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Essential:

They are essential requirements basic knowledge of advanced organic chemistry, organic synthesis and instrumental techniques in chemistry.

## OUTCOMES

### 2226 - M.D. in Organic Chemistry

- Students can apply the knowledge acquired and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.
- Students are able to integrate knowledge and handle the complexity of formulating judgments based on information that, while being incomplete or limited, includes reflection on social and ethical responsibilities linked to the application of their knowledge and judgments.
- Students can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences, clearly and unambiguously.
- Students have the learning skills that will allow them to continue studying in a way that will be largely self-directed or autonomous.
- Students have the knowledge and understanding that provide a basis or an opportunity for originality in developing and/or applying ideas, often within a research context.
- Utilizar las distintas técnicas de exposición -oral, escrita, presentaciones, paneles, etc- para comunicar sus conocimientos, propuestas y posiciones.
- Be able to access to information tools in other areas of knowledge and use them properly.
- Saber participar en debates y discusiones, dirigirlos y coordinarlos y ser capaces de resumirlos y extraer de ellos las conclusiones más relevantes y aceptadas por la mayoría.
- Poseer habilidades sociales, un buen nivel de comunicación oral y escrita, así como capacidad para trabajar en equipo y con personas de diferentes procedencias.
- Competencias de gestión tales como la capacidad para la planificación y gestión de tiempo y recursos, así como para dirigir y tomar decisiones.
- Ser capaces de valorar la necesidad de completar su formación científica, en lenguas, en informática, asistiendo a conferencias o cursos y/o realizando actividades complementarias, autoevaluando la aportación que la realización de estas actividades supone para su formación integral.



## LEARNING OUTCOMES

The final aim of the Final Master Assignment, is the application to practical cases the learning activities and competences indicated in the initial program, giving the students the basic tools and skills of the laboratory experimental work, acquired under expert supervision.

The students should demonstrate:

- a. Understanding of the value and limitations of the scientific method.
- b. Ability to act according scientific methodology regarding the definition of the problems, formulation of the hypothesis, strategy- and the experimental methodology selection, extraction, evaluation and interpretation of the results, and the elaboration of conclusions.
- c. Ability to search, extract, organize and interpret organic chemistry and pharmaceutical information from the data bases and other sources.
- d. Ability to communicate the results, using diverse methodologies accessible to the students, being aware of its limitations.
- e. Ability of relation of the components of a research team or a professional environment.
- f. Design, selection and/or development products and chemical processes efficiently (ODS 7) that minimize their impact in the environment (ODS 14 and 15), taking advantage of the alternative row materials and generating the minor amount of residues possible (ODS 11)

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Graduation project		100
*Realización del Trabajo Fin de Máster	450,00	0
Presentación y defensa del Trabajo Fin de Máster	100,00	0
<b>TOTAL</b>	<b>550,00</b>	

**TEACHING METHODOLOGY**

At the beginning of the course, the Academic Coordination Committee of the Master will assign the theme and director (or tutor if necessary) of the subject Final Master Assignment to each student that ask for it. The criteria of adjudication will be related to the academic performance, and if it is possible, attending the preferences showed by the students.

The student will perform the proposed work under the supervision and direction of the assigned Professor in charge, which will be also responsible of the final grade.

The subject Final Master Assignment will be evaluated for a committee designed by the Academic Coordination Committee of the Master.

**EVALUATION**

The Final Master Assignment will be evaluated by a committee designed by the Academic Coordination Committee of the Master.

In this evaluation, special attention to the experimental design should be paid, together with a clear discussion, rigorous and organized, of the results of the laboratory work performed either in the University or in a Company, and the written and oral presentations of the students.

Final assignment should be done according to a model proposed by the Academic Coordination Committee.



## REFERENCES

### Basic

- Tanto la bibliografía básica como la complementaria necesaria para la realización del Trabajo de laboratorio constituye una de las tareas iniciales y prioritarias a realizar de manera autónoma por parte del alumno.