

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

<b>Code</b>	44615
<b>Name</b>	Research placement
<b>Cycle</b>	Master's degree
<b>ECTS Credits</b>	14.0
<b>Academic year</b>	2021 - 2022

**Study (s)**

<b>Degree</b>	<b>Center</b>	<b>Acad. year</b>	<b>Period</b>
2218 - M.U. en Química	Faculty of Chemistry	1	Second term

**Subject-matter**

<b>Degree</b>	<b>Subject-matter</b>	<b>Character</b>
2218 - M.U. en Química	15 - Research placement	External Practice

**Coordination**

<b>Name</b>	<b>Department</b>
BAEZA BAEZA, JUAN JOSE	310 - Analytical Chemistry

**SUMMARY**

In this subject the student will have a first contact with research through a stay in a research group to develop a specific work. Through this work, the maturity of the student will be evaluated to address a research problem in the chemical field.

The stay will be made under the supervision of a director, and will be developed within any of the lines of research offered by the director's group. The Academic Coordination Committee will ensure that the topic of the work is in close connection with the educational itinerary followed by the student. Its purpose must be the in-depth study of a topic of interest, specific to their speciality. It includes both, a research work on a specific topic with a theoretical or experimental orientation, or an exploratory work on one or more burning issues in the scientific community, whether theoretical or experimental.



## PREVIOUS KNOWLEDGE

### Relationship to other subjects of the same degree

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

### Other requirements

Prior knowledge of chemistry and experimental work in the laboratory of chemistry taught in the degrees indicated in the recommended income profile for the student of the master's degree are required.

## OUTCOMES

### 2218 - M.U. en Química

- 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.
- Be able to solve complex chemistry problems, whether in the academic, research or industrial application areas at a specialization or masters-level.
- Possess the necessary skills to develop multidisciplinary activities within the field of chemistry at the master's level.
- Be able to design, perform, analyse and interpret experiences and complex data in the environment of chemistry at a specialization level.
- Be able to address any type of research in the field of chemistry and/or chemical industry at the level of disciplinary knowledge and appropriate specialization to master's studies.

## LEARNING OUTCOMES

To know the characteristic techniques of a research laboratory, so that they will be able to develop research in the field of chemistry.

To know how to analyze and combine data from various studies and fields.

To know how to choose the most appropriate methodology for conducting a research.

To plan and manage the resources of a research laboratory in order to conduct a research work in a research group and to carry it out efficiently.



## DESCRIPTION OF CONTENTS

### 1. Research placement

The specific contents of the work will be determined by the research group in which the student will be integrated, as well as by his/her supervisor or Director. The project to be carried out will be validated by the Academic Committee of the Master, taking special care that the objectives and methodology are adapted to the contents of the Master.

## WORKLOAD

ACTIVITY	Hours	% To be attended
Internship		100
Development of individual work	15,00	0
Internship	320,00	0
Seguimiento y tutorización de Prácticas externas	15,00	0
<b>TOTAL</b>	<b>350,00</b>	

## TEACHING METHODOLOGY

Each student will be assigned an academic tutor (with a PhD degree) who will supervise, direct and guide the student during their participation in the project, helping him/her to develop the characteristic techniques and skills of a research task in the Academic itinerary.

For each academic year, the Academic Coordination Committee, at the proposal of the professors of the Master, will provide a list of topics for the Research Internship (as well as the names of the corresponding tutors), in sufficient numbers for students to have a wide variety of topics to choose from. The project will be carried out in a Center, Institute or Research Department.

The students will use the results and conclusions of the research task carried out in this subject to elaborate, write and defend their Final Master's Project within the framework of the subject of the same name.

## EVALUATION

In this subject, all aspects related to the performance of students in the assigned research task will be evaluated. At the end of the research stay each student will prepare a REPORT of the STAY that will contain, at least the following items:

1. General data of the Research Placement.
2. Personal information.
3. Calendar of the Research Placement.
4. Data of the Research Group



5. Brief description of the field of activity of the Research Group.
6. Activity memory.
7. Description of tasks.
8. Assessment of the tasks in relation to the studies.
9. Objectives and work planning.
10. Assessment of the training aspects.
11. Evaluation of the stay by the student and suggestions for improvement.

The academic tutor will issue a report on the execution of the work by the student, along with a grade, on a scale of 0 to 10, which will represent 100% of the grade of the subject.

The aspects assessed by the academic tutor in his/her report will include, among others: (1) the attitude of the student in relation to his/her dedication to the project (work capacity, motivation and responsibility, as well as the ability to make his/her own contributions); (2) the quality and rigor of the written report (its wording, format, structure, accuracy of conclusions, etc.); (3) the quality of the research task carried out (achievement of the objectives, methodology used, etc.).

## REFERENCES

### Basic

- Modelo del Informe de valoración de la Estancia de Investigación por parte del tutor/a académico/a - Model de l'informe de valoració de l'Estada d'Investigació per part del tutor/a acadèmic/a - Model of the Assessment Report for the Research Stay, to be issued by the academic supervisor: <https://www.uv.es/master-quimica> (Pestaña/Pestanya/Tab: Programa del Master/ TFM/ anexo VIII)
- Modelo de la Memoria de Actividades de la Estancia de Investigación / Model de la Memòria d'Activitats de l'Estada d'Investigació / Model of the Activities' Report of the Research Stay, to be written by the student: <https://www.uv.es/master-quimica> (Pestaña/Pestanya/Tab: Programa del Master/ TFM/ anexo XIIa)

## ADDENDUM COVID-19

**This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council**

*In accordance with the Instruction of January 7<sup>th</sup> 2021 regarding the adaptation of external internships for all qualifications, with the exception of degrees in medicine, nursing, teaching and secondary school teachers' training, to the COVID-19 pandemic for the 2020/21 academic year, for students enrolled in curricular external internships in the 2020/21 academic year, face-to-face internships may be carried out, on a regular basis, provided that there are no new instructions from the relevant authorities.*



*When the internship cannot be carried out in its entirety during the academic year, the coordinator of the subject matter and the Master's Academic Coordination Committee will arbitrate alternative solutions that will guarantee its development, supervision and numerical evaluation, depending on the degree of achievement reached and the skills to be developed.*

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