

Academic Year/course: 2023/24

27223 - Undergraduate Dissertation

Syllabus Information

Academic year: 2023/24 Subject: 27223 - Undergraduate Dissertation Faculty / School: 100 - Facultad de Ciencias Degree: 107 - Mobility for Degree 452 - Degree in Chemistry ECTS: 9.0 Year: Semester: Annual Subject type: End of Grade Dissertation

1. General information

Module:

The Degree Final Project (DFP) Project is a subject where the knowledge and skills acquired throughout the degree are integrated and where the student demonstrates the level of competencies they has achieved. In the DFP the student must develop a topic or work project related to Chemistry following an established plan, draft a report and defend it in front of a specialized board of examiners.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations ((<u>https://www.un.org/sustainabledevelopment/es/)</u>:

Goal 3: Health and wellness

Goal 4: Quality Education.

Goal 5: Gender Equality.

Goal 6: Clean water and sanitation

- Goal 7: Affordable and non-polluting energy
- Goal 9: Industry, Innovation and Infrastructure
- Goal 11: Sustainable Cities and Communities
- Goal 12: Responsible Production and Consumption

Goal 13: Climate Action

2. Learning results

- Develop a work project, associated with specific objectives or problems related to Chemistry, in an autonomous, critical and responsible way.
- Apply, in a practical way, the principles and methodologies of Chemistry in any of its branches.
- Critically and constructively discuss scientific problems, defend ideas and propose new initiatives to solve a problem.
- · Integrate into multidisciplinary work teams.
- · Correctly and autonomously elaborate a scientific report.
- Demonstrate autonomy in the search and management of the bibliography or documentation necessary for the DFP.
- Deliver a concise and rigorous scientific presentation, so that it can be understood by both specialized and nonspecialized audiences
- Adequately defend the results obtained.

3. Syllabus

The topics to be addressed in the DFP belong to any area of Chemistry. The DFP offer is defined at the beginning of the academic year and is elaborated with the proposals of the different Departments.

The DFP can be of different types:

Type 1: Experimental work in the laboratory to obtain and interpret results generated by the student.

Type 2: A work of a theoretical nature for the interpretation of results or understanding of phenomenologies related with chemistry.

Type 3: A study or project related to the chemical industry or related sectors in any of the aspects in which a chemist has competence.

Type 4: An original and critical bibliographic work based on the search for information in contrasted sources.

4. Academic activities

The Final Degree Project will be directed by a teacher, who defines the objectives of the project and supervises the student throughout the work . The work methodology will depend on the subject matter and objectives of each project. In any case, the student must carry out the following activities:

1.- Experimental work of the DFP (performance of the experiments, data collection and analysis, associated calculations, bibliographic consultation, etc.)

2.- Elaboration of the DFP Report

The DFP report must include, in the appropriate length, order and form depending on the type of work, the following sections:

- table of contents
- summary, in English and Spanish
- introduction / background
- objectives and approach of the work
- results and discussion
- experimental part, including techniques and equipment used
- conclusions
- bibliography consulted
- annexes, if any

The printed report will have a maximum length of 25 pages in DIN A-4 format, except for the presentation, table of contents, abstract and annexes.

3.- Presentation and defence of the DFP. The presentation will have a maximum duration of 15 minutes and for the defence there will be a maximum of 30 minutes.

5. Assessment system

The DFP will be evaluated through the public defence of the same in front of a board, which will grade the following aspects:

1. Written report. This section will judge the work methodology and the quality of the results (always considering the student's level of competence), as well as the adequate written presentation, taking into account that it is an autonomous work done by the student under supervision. (40 % of the final grade)

2. Report prepared by the directors (according to the model approved by the QMC. (20 % of the final grade)

3. Oral presentation. The ability to orally present the objectives, results and conclusions of the DFP will be evaluated. (20 % of the final grade)

4. Defence of the results. The student's ability to answer the questions posed and to discuss the results of the dissertation with the board of examiners will be evaluated. (20 % of the final grade)

In case of a negative evaluation of the DFP (grade lower than 5), the examining board will issue a report detailing the deficiencies of the DFP, both methodological and content, which have led to such consideration, indicating the modifications that will be necessary for a new defence.