

## 63241 - Master's Dissertation (Biology and Geology)

### Syllabus Information

**Academic year:** 2024/25

**Subject:** 63241 - Master's Dissertation (Biology and Geology)

**Faculty / School:** 107 - Facultad de Educación

**Degree:** 584 - Master's Degree in Teaching Compulsory Secondary Education  
595 - Master's Degree in Teaching, specializing in Biology and Geology

**ECTS:** 6.0

**Year:** 1

**Semester:** Annual

**Subject type:** Master Final Project

**Module:**

### 1. General information

Based on the specific competences of the degree, the objective of the Master's Final Project (MFP) subject is that students exercise their capacity for reflection and synthesis on their own training process, which includes not only theoretical training, but also its practical application through the professional experience of the Practicum in the context of Biology and Geology and similar subjects, for which the specialty learnt in this master qualifies the student.

### 2. Learning results

1. Produce an academic paper containing original contributions by applying the knowledge, skills, abilities, aptitudes and attitudes acquired throughout the master's studies.
2. Work autonomously and responsibly to achieve the proposed objectives.
3. Critically evaluate their own work as teachers.
4. Present their work, both orally and in writing, and defend it with order, clarity, argumentative rigor and linguistic correctness.

### 3. Syllabus

No specific content is defined for this subject.

### 4. Academic activities

The MFP, which will be carried out individually, may be directed by one or co-directed by a maximum of three teachers of the master. Of the 6 ECTS (150h), 140h correspond to the student's work for the preparation of the report, and 10h for the preparation of the presentation and defence of the work.

The task of directing the MFP will consist of: 1) providing students with general guidelines on the nature and requirements of the type of work to be done, 2) holding periodic meetings on the student's work to guide them in the preparation of the written report and in the presentation and oral defence of the MFP, and 3) to validate and authorize the work to be evaluated by the board of examiners.

#### TYPES OF MFP

- MFP modality A: it will consist of an original and integrative report in which a critical analysis that reflects the integration of the different knowledge and practices of their training process in the specialty of Biology and Geology will be carried out. It may content the following:

I. Introduction.

II. Didactic analysis of two activities carried out in subjects of the master's degree and their application in the design of the didactic proposal.

III. Didactic proposal

IV. Activities

V. Analysis of learning results

VI. Critical analysis of the didactic proposal and proposal for improvement

VII. Final considerations

VIII. Bibliographic references

IX. Annexes

- MFP modality B: work of initiation to research related to lines of innovation or research previously offered by the teachers of the area at the beginning of the term See information at <http://educacion.unizar.es/master-profesorado-secondary/modality-b-tfm>

The assigned director will provide precise instructions on the structure and content of the report in each of the modalities of MFP. These have been agreed upon by the teachers of the specialty and are common for the realization of the MFP of Biology and Geology.

The TFM will have a maximum length of 40 pages including annexes (Times New Roman 12, single spacing, margins normal, justified on both margins). Bibliographic references should be cited according to current APA standards. The instructions for deposit and delivery to the secretary's office are updated at <https://educacion.unizar.es/master-professorship-secondary/tfm-master-teaching-staff>

## 5. Assessment system

In order to be evaluated, the student must have fulfilled each and every one of the following requirements, without which, the director will not authorize the student to deposit their MFP

- Follow the director's instructions regarding the structure and writing of the report.
- Attend tutorials scheduled by the director.
- The director has not made any complaints to the specialty coordinator about any lack of respect and due consideration to the faculty by the student.
- Submit a correctly written report containing at least 10 quotes from Didactics of Experimental Sciences justifying the work
- The final report of the MFP must have been corrected at least twice by the director, and must be sent at least one week in advance for the last revision before submission.

If the above premises are met and the deposit is authorized, the three-member board will evaluate:

- The ability to synthesize and integrate the acquired learning and to contribute their own ideas (80%):
  - Background and references: Extent of the bibliographic review and adequacy of the sources used and synthesis of the most relevant works.
  - Training and professional maturity: Knowledge and understanding of current trends in the educational field of Biology and Geology, precision and rigor in the use of concepts and contents, related to the teaching of the subjects of the specialty, originality and quality of the proposals and contributions, positive and constructive attitude towards the teaching profession.
  - Capacity for analysis and reflection: Critical reflection on the implementation in practice of the project designed and conclusions for professional learning as a teacher, depth of reflection and analysis and coherence in the reasoning and lines of argument followed in the development of the work.
  - Written communication skills: Compliance with the established format and the rules for citations and references, general structure and coherent organization of the different sections of the paper and adequacy of the general and professional discourse and written expression.
- Oral communication skills (20 %): Mastery and understanding of the subject matter. Clarity, rhythm and organization of the exposition. Use of body language and voice. Selection of key information. Synthesis capacity.

Compliance with the established times (15 minutes of exposition). Adequate and pertinent argumentation in response to the questions and comments of the members of the Board (15 minutes).

The grade (from 0 to 10) will be the average between the global values assigned by each member of the board, and will be exposed in the bulletin board or in Moodle, indicating the established review date. In the event that the grade is lower than 5, the board will indicate the modifications that will be necessary to carry out in the work or in the new defence of the same.

Finally, it must be taken into account that the Regulations of the Rules of Coexistence of the University of Zaragoza will be applicable to irregularities committed in the evaluation tests through academic fraud, as well as the application of article 30 of the Regulations of the Rules of Evaluation of Learning in relation to irregular practices other than academic fraud.

## 6. Sustainable Development Goals

4 - Quality Education