

## 26428 - Undergraduate Dissertation

### Información del Plan Docente

<b>Academic Year</b>	2016/17
<b>Academic center</b>	100 - Facultad de Ciencias
<b>Degree</b>	296 - Degree in Geology
<b>ECTS</b>	9.5
<b>Course</b>	4
<b>Period</b>	Annual
<b>Subject Type</b>	End of Grade Dissertation
<b>Module</b>	---

### **1.Basic info**

#### **1.1.Recommendations to take this course**

The student is recommended to read in detail the own guidelines of the Degree Final Project (TFG, or *Trabajo Fin de Grado* in spanish) approved by the Committee on Quality Assurance (CGC, or *Comisión de Garantía de la Calidad* in spanish) of Degree in Geology. These guidelines together with annexes can be downloaded through the Website of the Faculty of Sciences.

#### **1.2.Activities and key dates for the course**

- Before May 31 of the previous academic year: publication of initial offer of proposals of TFG approved by the CGC.
- Before October 5: delivery by student of the Custody Agreement (Annex II) in the Secretariat of the Faculty of Sciences, if it has already established such an agreement.
- Before November 30: if need be, request of new proposals of TFG by the CGC, and delivery by the student of the Custody Agreement (if you have not done in the previous phase).
- Before December 15: Publication of the final assignments of TFG.
- Eight days before the first day of the period in which the TFG will be defended: Deposit of Report under current regulations.
- February, June, September and December (maximum two calls), on dates to be determined in the exam schedule of the

## 26428 - Undergraduate Dissertation

Faculty of Sciences: Defence of the TFG in court. For more information:

<https://ciencias.unizar.es/trabajo-fin-de-grado-en-geologia>

### 2. Initiation

#### 2.1. Learning outcomes that define the subject

The student, for passing this subject, must show the following results:

1. Able to explain, link and use clearly and fluently concepts, models and theories that are part of the Degree in Geology.
2. Able to analyze and synthesize information obtained in the literature, field work and laboratory on geological issues in a report well structured and with appropriate content.
3. Able to explain and defend before tribunal and in public the development and results of the executed geological work.

### 2.2. Introduction

The student will develop in this course a personal project of Geology. This work, proposed by a professor of the Degree, may be related to one or more of the disciplines of Geology. Work and Presentation is individually and should include a part of personal contribution, not bibliographic, developed during the development of the TFG. This subject has no theoretical load, although each TFG will have your personal tutor. The TFG offer provides a wide choice, encompassing all disciplines in which the student could want deepen.

### 3. Context and competences

#### 3.1. Goals

The TFG is a project that must show, by individual realization of a general geological work, knowledge, skills and attitudes acquired by students throughout their training. The work must be original and allow the student to obtain data and own results. It may involve conducting activities of field, desk and/or laboratory. Regardless of the topic, all TFG should contain sufficient information about the geological context of the area or problem studied.

#### 3.2. Context and meaning of the subject in the degree

This subject allows the student to put into practice the knowledge and skills acquired in the Degree for the study of a problem or real case similar to those that might arise in their professional life. Therefore, the proposed TFG are real and it is intended that the results are valid and usable. It is intended ultimately that the student feels able to properly develop a geological work, from a problem posed by the professor.

#### 3.3. Competences

## 26428 - Undergraduate Dissertation

**When pass the subject, students will be more competent to ...**

1. Search the tools to solve a geological problem of laboratory or field.
2. Handle correctly the literature, including publications in English.
3. Synthesise the published geological information, so that it can be used appropriately for the resolution of a geological work.
4. Transmit information both data and geological observations made personally to other professionals.
5. Apply the methods and geological techniques for solving a particular work/problem.
6. Present and defend in public the geological works developed personally.

### **3.4.Importance of learning outcomes**

Learning outcomes of this subject are essential for the future geologist, both whether it is engaged in professional work and the research. Data, observations and conclusions obtained from geological work are meaningless if are not structured in a report that can be read and understood by other professionals.

### **4.Evaluation**

**The student must demonstrate that it has achieved the intended learning outcomes through the following evaluation activities:**

Each TFG will have a director who will tutelary and validate the performance of the work process, in accordance with the provisions of the teaching guide for the TFG. The director will give the right indications to guide students in the development of TFG, considering that the student is the really responsible in obtaining, processing and interpretation of data. The work must have the approval of the director and, where appropriate, the rapporteur.

### **REPORT OF THE TFG**

## 26428 - Undergraduate Dissertation

1. Student must deposit the TFG report in the Secretariat of the Faculty of Sciences, using the Annex IV (Deposit of the TFG in Geology).

2. The TFG report shall comply with the following requirements:

- The TFG must have no less than 11-point font size, with 1.15 line spacing, and margins of at least 2.5 cm. The table of contents should go just before the start of report and it will not exceed 25 pages, excluding annexes.

- The main text will consist of the following sections: table of contents, abstract in English (approximately one page), approach, objectives, methodology, geological context, presentation and discussion of the main results, conclusions in English, and bibliography.

- The number of figures, tables and photographs should be proportional to the text in size and quantity; all must be cited in the text and contain brief figure captions.

- In the main text of the report and the bibliography section, references will follow the editorial standards adopted by the CGC of the Degree in Geology in the document associated of its own guidelines. Only references cited in the report will be included in the bibliography section.

- The Annexes may include only those graphs, maps, tables or listings that its format or extension cannot be included in the main text and are essential for proper understanding and evaluation. The extent of these annexes will never be higher than the report.

- The director of a TFG must ensure that the report submitted meets the established standards of editing, before giving approval for deposit.

3. When making the deposit of work, the student must provide the Verifier of TFG deposit in the DEPOSITA application and a printed version of the report and its annexes, which will be available to the Tribunal before the day of the defence and returned to the student after the deadline of claims.

4. The deposit of this documentation will be held at the Secretariat of the Faculty of Sciences, at any school day, with a minimum of 8 school days before the first date of the call in which the student claims to defend the work.

### DEFENCE

1. The TFG defense can be made only when the student only has pending of overcome a maximum of twelve ECTS of the Degree, provided that there is a reasoned and favorable report of the Director and the approval, if applicable, of the rapporteur, considering in any case the official regulations approved by the University of Zaragoza.

## 26428 - Undergraduate Dissertation

2. The Faculty Board included in the academic calendar of each course the periods of defense of the TFG, which are at least four: three after the calls for exams of February, June and September and another in December. The registration gives right to defend work up twice in the same academic year in any of the periods that the Faculty of Sciences has established.

3. The tribunals are composed of three members and the same number of alternates, and shall be appointed according to the regulations.

4. The CGC will assign TFG to tribunals according to criteria of thematic affinity, but considering that no member of the tribunal (both titular and alternate) is a director or rapporteur of any work to be assessed.

5. The tribunals shall make public on the bulletin board of the Secretary of the Department of Earth Sciences the call for defence of the TFG, with at least five calendar days before the start of the defence, indicating therein a detailed schedule that includes date (as published in the academic calendar of the Faculty), hour, place and students who are summoned as well as the evaluation criteria. It is responsibility of the Secretary of the Tribunal provide the place and means necessary for the exhibition and defence in the day and hour.

6. The defence of the work will be done in public, always in school period and with the full tribunal. It is recommended that exposure has a maximum duration of twenty minutes and in no case shall exceed thirty minutes, including reading of the findings in English. Then there will be a discussion with members of the tribunal on its content and presentation.

7. The reading the conclusions will be mandatory in English. The passing of a TFG will mean for the student the recognition of 2 ECTS in English language.

### **Evaluation and Qualification Criteria**

1. The tribunal will assess and rate the TFG considering the quality of the report, its exhibition and the subsequent discussion, using the following criteria:

- The scientific quality of the work, up to a maximum of 5 points, assessing among other things the appropriateness of the methods used to the proposed objectives, the clear statement of the findings, and conclusions based correctly on the results.

## 26428 - Undergraduate Dissertation

- The written work (report) will be rated with a maximum of 2 points assessing the adequacy of the report to the rules set out in Article 4 of the current Regulation, the correct use of the literature, the use of appropriate vocabulary and language, and that the figures are properly referenced and explained.

- The oral presentation, defence and discussion will be graded up to 3 points, considering the adequacy of the exhibition to the submitted TFG, the dissertation and material presented during the same, the distribution of time, and finally the adequacy between questions raised by the tribunal and answers.

2. The rating of the TFG is made analogous to that of the subjects included in the degree, indicating the quantitative and qualitative rating. The minutes shall be signed by all members of the tribunal.

3. Before qualifying the TFG, the tribunal may request additional information to the director, the co-directors or the rapporteur.

4. In case of a negative evaluation of the TFG, the tribunal shall issue a report detailing those weaknesses, both methodological and in content, indicating the necessary modifications to be corrected at the work, or proposing a new defence of the TFG in a subsequent call.

5. The CGC has approved, as document associated to the own guidelines of the TFG in Geology, a evaluation statement to be used by the members of the tribunal.

### 5. Activities and resources

#### 5.1. General methodological presentation

The learning process that is designed for this subject is based on the following: The TFG is governed by the general rules of the University of Zaragoza and the Faculty of Sciences, and own guidelines adopted by the Committee on Quality Assurance of the Degree in Geology:

<https://ciencias.unizar.es/trabajo-fin-de-grado-en-geologia>

This is a basic subject that the student performed at the end of the studies of the Degree and in which has to prove that it has acquired sufficient knowledge to exercise as geologist. Therefore, the learning process that has been designed for this subject is personal by means of the literature search and observations performed by the student. The work is supervised by a director who should guide the student, especially in the early stages of the study. If necessary, the director must also guide the student for not performing a work too broad or not focusing on aspects too specific.

## 26428 - Undergraduate Dissertation

### 5.2.Learning activities

Specific activities are apportioned in the proposals of the TFG presented and approved by the Committee on Quality Assurance of Degree in Geology.

### 5.3.Program

The proposals of TFG for the academic year 2016-17 (initial offer), presented and approved by the Committee on Quality Assurance of Degree in Geology in June 2016, are the following:

[https://ciencias.unizar.es/sites/ciencias.unizar.es/files/users/fmlou/pdf/Asuntos\\_academicos/oferta\\_tfg\\_geologia\\_2016-17.pdf](https://ciencias.unizar.es/sites/ciencias.unizar.es/files/users/fmlou/pdf/Asuntos_academicos/oferta_tfg_geologia_2016-17.pdf)

Before November 30, the CGC of the Degree in Geology will ensure the allocation of subject and director to all matriculate students, approving new proposals if necessary.

### 5.4.Planning and scheduling

The dates for submission and defence of the TFG will be set by the Faculty of Sciences and published on its website.

### 5.5.Bibliography and recommended resources

No bibliographic records for this subject