

| Degree | Type | Year |
|--------------------------------|------|------|
| 2501915 Environmental Sciences | OB | 4 |

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Teachers

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

The prerequisites for taking this course are those included in the Academic Regulations of the UAB. In the article 134 of this regulation, it is established that, in order to be able to enroll in the TFG, it is necessary to have passed at least two thirds of the total credits of the syllabus. However, since it is a subject with cross-curricular content, it is recommended that you have passed most of the subjects of the previous courses.

It is also demanded to be studying or to have studied the subject of Organization and Project Management, since in this subject the project bases, management and the methodological, graphics and IT tools necessary to be able to make a project with guarantees, are explained.

Objectives and Contextualisation

The Final Thesis is understood as a subject that collects and integrates the competencies associated with the degree in Environmental Sciences. The student must, therefore, demonstrate that he has assumed the skills and learning outcomes of the degree and put them into practice in the execution of a project.

Competences

- Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.

- Analyze and use information critically.
- Collect, analyze and represent data and observations, both qualitative and quantitative, using secure adequate classroom, field and laboratory techniques
- Demonstrate adequate knowledge and use the most relevant environmental tools and concepts of biology, geology, chemistry, physics and chemical engineering.
- Demonstrate adequate knowledge and use the tools and concepts of mathematics, computer science and statistics to analyze and manage environmental issues.
- Demonstrate adequate knowledge and use the tools and concepts of the most relevant social science environment.
- Demonstrate concern for quality and praxis.
- Demonstrate initiative and adapt to new situations and problems.
- Develop analysis and synthesis strategies regarding the environmental implications of industrial processes and urban management
- Develop communication strategies on environmental issues, including environmental risks
- Information from texts written in foreign languages.
- Integrate environmental information in order to formulate and test hypotheses.
- Integrate physical, technological and social aspects that characterize environmental problems.
- Learn and apply in practice the knowledge acquired and to solve problems.
- Quickly apply the knowledge and skills in the various fields involved in environmental issues, providing innovative proposals.
- Teaming developing personal values regarding social skills and teamwork.
- Work autonomously

Learning Outcomes

1. Adequately convey information verbally, written and graphic, including the use of new communication and information technologies.
2. Analyze and synthesize environmental implications in industrial and land management processes.
3. Analyze and use information critically.
4. Apply knowledge of any of the main areas of scientific disciplines in the environment to a draft final grade.
5. Apply knowledge of any of the main areas of the social sciences in the environment to a draft final grade.
6. Communicate environmental problems with proper attention to the problems of environmental risk and the relevant regulations in the fields of safety and environmental health.
7. Communicate orally and in writing a job final grade.
8. Demonstrate concern for quality and praxis.
9. Demonstrate initiative and adapt to new situations and problems.
10. Identify processes sciences, life sciences and social sciences in the surrounding environment and evaluate them properly and originally.
11. Information from texts written in foreign languages.
12. Integrate environmental information with environmental knowledge acquired from the sequence of observation, recognition, synthesis and modeling.
13. Integrate environmental knowledge into practice.
14. Integrate the acquired knowledge and skills to solve problems arising at the end of degree project.
15. Learn and apply in practice the knowledge acquired and to solve problems.
16. Observe, recognize, analyze, measure and properly and safely represent environmental processes.
17. Prepare a report explaining the results obtained in carrying out a research project in the field of environmental sciences.
18. Teaming developing personal values regarding social skills and teamwork.
19. Work autonomously

Content

Those related to each Bachelor Thesis.

Activities and Methodology

| Title | Hours | ECTS | Learning Outcomes |
|------------------------|-------|-------|---|
| Type: Directed | | | |
| Evaluation | 2 | 0.08 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 |
| Type: Supervised | | | |
| Follow-up session | 32 | 1.28 | 8, 9, 18 |
| Type: Autonomous | | | |
| Preparation of the TFG | 264 | 10.56 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 |

The subject is programmed in the two semesters of the course. Students have to choose which semester they will take and they need to be evaluated in that semester.

Teaching activities of the subject will be structured as follows:

- Tutorials: The follow-up and direction of the Final Project will be done through weekly tutorials on the schedule established by the degree.
- Field trips of one day or more will be carried out, depending on the chosen work.

Typology and allocation of TFGs

The TFG will be proposed by the teaching team of the TFG subject based on proposals received from institutions that collaborate with the subject such as Fundació Catalunya la Pedrera (La Vall d'Alinyà), Barcelona Municipal Services (BMS), the Municipality of Sabadell among others. Therefore, the execution of the TFG will entail the displacement and the collection of data in the study areas.

A list of works offered by researchers from the UAB will occasionally be offered, namely Singular-TFG. The teaching team of the TFG subject will evaluate and accept, or not, the proposals as Singular-TFG.

The information of Thesis titles proposal list will be published on the Virtual Campus prior to the beginning of each semester. The assignment of the TFG to each group of students will be done on the first day of tutoring.

The works must be done in groups of 3 students and a minimum of 2 for the TFG-S. One-person Thesis will not be accepted. The teaching team of the TFG subject will assign the tutors for each TFG. In the case of the TFG-S, there will be the tutor who has proposed the work and a tutor from the teaching team of the TFG subject.

Documents and presentations content

(Delivery contents presented below are indicative and will be clearly specified at the beginning of each semester)

Throughout the TFG different delivery of documents and presentations will be made:

First Delivery

Document with the following contents:

- Authors and Final Title of the project

- Objectives of the project
- Temporary programming

The delivery of the documentation will be done in a unique pdf file through the Virtual Campus. Therefore, a date and time limit will be established to do the delivery.

Second Delivery

This partial delivery will consist of an oral presentation and its associated documentation. Delivery and defense will be held between the 8th and 10th week of the subject. The first delivery documentation will be:

- Cover
- Index
- Introduction
- Objective of the project
- Methodology, materials and study and calculation basis
- Task programming
- References

The delivery of the documentation will be done in an unique pdf file through the virtual Campus. Therefore, a date and time limit will be established to make the delivery.

The oral presentation will have a maximum duration of 10 minutes and will be followed by a discussion with the committee of a maximum of 15 minutes. The presentation will be done in PowerPoint or similar software. If PowerPoint will be not used students will have to make sure that the software is installed on the computer or should bring their own computer.

Final delivery

The final delivery corresponds to the final report of the document with a maximum extension of 50 pages plus the annexes. This report must include all the recommendations and modifications raised by the committee in the partial delivery. The final delivery and defense will be done in the last weeks of the semester. The final report will include the following sections:

- Cover: with the title, the name of the authors and the tutors, the reference of the course and indicating that it is a Final Project of the Degree in Environmental Sciences of the UAB. The institutions that have collaborated in the TFG will also be indicated, when appropriate.
- Acknowledgments (optional)
- Index
- Executive summary
- Introduction
- Objective of the project
- Methodology, materials and study and calculation bases
- Results and discussion
- Conclusions
- Annexes
 - Graphic documentation: Cartography, plans (if necessary).
 - Task Programming: planned and real.

Prior to the date and time limit set, the final reports will be delivered through the Virtual Campus. The court will evaluate the contents and the format of the memory based on the copy presented by the Virtual Campus.

On the day of the defense, the groups that have made the TFG with one of the institutions that collaborate with the subject will deliver a paper copy of their work, so that their tutor can send it to the institution.

The final presentation will have a maximum duration of 20 minutes followed by a discussion with the committee of a maximum of 20 minutes. The presentation will be done in PowerPoint or similar software. If PowerPoint will be not used students will have to make sure that the software is installed on the computer or should bring their own computer. The presentation will contain:

- First slide with the title, name of the authors and directors, logos of the UAB and specifying what it is about a fine project of environmental science career. If this is the case, the logo of the collaborating institutions must be included.
- The second slide with a Table of contents with the sections of the presentation.
- The following slides will correspond to the explanation of the memory, with the sections that the students believe necessary.
- The last slide is the repetition of the first one.

Insurance

Students who include TFG travel, transportation or stay in laboratories (including those of the UAB) will have to take out an additional insurance that must be processed in the *Gestió Acadèmica* of the Faculty of Sciences.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

| Title | Weighting | Hours | ECTS | Learning Outcomes |
|--------------------|-----------|-------|------|---|
| 1st presentation | 30 | 1 | 0.04 | 1, 4, 5, 6, 7, 8, 9, 10, 11, 14, 15, 16, 17, 18, 19 |
| Final presentation | 70 | 1 | 0.04 | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 |

Evaluation

The evaluation will be done through the delivery of documents and their oral defense. The objective is to evaluate the follow-up of the projects and improve it for the final document. There will be different committees formed by three teachers of the subject, who will be monitoring the project. In the case of the TFG-S, the tutors of these projects will also be part of the committee.

Three deliveries and two oral defenses that will be carried out throughout the semester:

- The first partial delivery, that will be evaluated jointly with the second partial delivery.
- The second partial delivery will include the delivery of a document and its oral defense. The teachers will evaluate the written documents and the presentation, suggesting improvements for the final document. The weight in the final mark of this partial delivery will be 30% in the final grade of the TFG. The note of this second delivery will include the evaluation of the first delivery.
- Final delivery that will correspond to the totality of the TFG. It will include the delivery of a document and its oral defense. The weight in the final mark of this delivery will be 70% in the final grade of the TFG.

The evaluation of the subject will always be individual, although the project has been elaborated collectively.

In the evaluation of each one of the deliveries, content and format criteria of the written memory, structure and contents of the oral presentation will be taken into account, the use the established time to do the oral presentation, as well as the ability to respond to the committee questions.

Failure to submit a delivery or not be present in one of the defenses will entail a qualification of "Non-Evaluable", losing all possibility to continue the subject in that semester.

Dates

At the beginning of each semester, the specific dates of deliveries and the defense of follow-up and the final defense will be fixed and the contents of each of the partial documents will be explained. Changes in the dates and times of the partial defense or the final will not be accepted.

Non-Evaluable qualification

Groups and students that do not enter the documentation or do not participate in the presentation of a delivery will receive a note of Non-Evaluable.

Honors Qualification

Granting a qualification of honors (MH) is a decision of the teaching staff responsible for the subject. The regulations of the UAB indicate that MH can only be awarded to students who have obtained a final grade of 9.00 or more. It can be granted up to 5% of MH of the total number of students enrolled.

Reviewing procedure

Students who wish to review the note of any of the deliveries must contact the person responsible of the TFG subject within three days after the publication on the grades of each delivery. Revisions after this period will not be accepted.

Recovery and repeating students

No recovery system is foreseen for the Final Thesis Degree course.

No alternative system is foreseen for repeating students.

Irregularities by the student: plagiarism

The Final Thesis Project must be an original work, based on the collection of data and the study of the related bibliography. Text generated by artificial intelligence cannot be used. When writing the memory, special care must be taken to avoid plagiarizing contents from other documents of any type (paper or digital). Therefore, plagiarism will involve the fail of the delivery (partial or final) with a zero punctuation without possibility to recover it. The use of text generated with artificial intelligence will imply the non-evaluation of the work.

Single Assessment

This subject cannot follow the single assessment procedure regulated by the Faculty of Sciences, as indicated in the information made public by the faculty.

Bibliography

That related to each TFG.

Software

MS Word (or alternative), MS Excel (or alternative), MS Powerpoint (or alternative).

Language list

Information on the teaching languages can be checked on the CONTENTS section of the guide.

PROVISIONAL