Universida_{de}Vigo

Subject Guide 2022 / 2023

| | | | | abject Gaiae 2022 / 2025 | | |
|-------------|-----------------------------------------------------------------------------------------------------------------|---------------------|------------------|--------------------------|--|--|
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| IDENTIFYIN | | | | | | |
| | Dissertation | | | | | |
| Subject | Final Year | | | | | |
| | Dissertation | | | | | |
| Code | V02G030V01991 | , | , | | | |
| Study | Grado en Biología | | | | | |
| programme | | | | | | |
| Descriptors | ECTS Credits | Choose | Year | Quadmester | | |
| | 18 | Mandatory | 4th | 2nd | | |
| Teaching | Spanish | | | | | |
| language | Galician | | | | | |
| Department | | | | | | |
| Coordinator | Míguez Miramontes, Jesús Manuel | | | | | |
| Lecturers | | | | | | |
| E-mail | | | | | | |
| Web | http://http://bioloxia.uvigo.es/gl/docencia/traballo-fin | -de-grao | | | | |
| General | | | | | | |
| description | escription Work. This module develops in the last year of the degree program in Biology. | | | | | |
| | The objective of the End of Degree Project is to offer the students the opportunity to apply knowledges, skills | | | | | |
| | and competences adquired during the Degree studie | | | | | |
| | The project consists in an original work that each stu | | | | | |
| | teacher (tutor), and will allow to demonstrate in an i | ntegrated way the | acquisition of c | ompetences and skills | | |
| | associated with the title. | | | 6.1.1 I | | |
| | Compliance with the regulations approved for the pr | | | | | |
| | management of all the processes corresponds to the | e Final Degree Proj | ect Committee, | which has been | | |
| | appointed for this proposal by the Faculty. | ممامسات ممامسات | مطله ما المصادة | activities are usually | | |
| | The subject does not have a fixed schedule in the ac developed throughout the second semester of the ac | | aithough all the | activities are usually | | |
| | developed infoughout the second semester of the ac | Laueillic year. | | | | |

Skills

Code

- A1 Students should prove understanding and knowledge in this study field that starts in the Secundary Education and with a level that, even though it is supported in advanced books, also includes some aspects that involve knowledge from the vanguard of the study field.
- A2 Students should know how to apply their knowledge to their work or vocation in a professional way. They also should have the competences that are usually proved through the elaboration and defence of arguments and the resolution of problems within their study field.
- A3 Students should prove ability for information-gathering and interpret important data (usually within their study field) to judge relevant social, scientific or ethical topics.
- A4 Students should able to communicate information, ideas, issues and solutions to all audiences (specialist and unskilled audience).
- A5 Students should develop the necessary learning skills to undertake further studies with a high degree of autonomy
- B1 Ability of organization and planning in the working area in a multidisciplinary environment relate to biology and other connected fields.
- B2 Ability of reading and analizing scientific papers and having critical assessment skills to understand data collection, deducing the main idea from the least relevant ones and basing on the correponding conclusions.
- B3 Acquisition of general knowledge about the basic subjects of biology, both at theory and experimental level, without dismissing a higher specialization in subjects that are oriented to a concrete professional area.
- Ability in handling experimental tools, both scientific and computer technology equipment that support the search for solutions to problems related to the basic knowledge of biology and with those of a concrete labour context.
- B5 Understanding of the levels of organization of living beings from a structural (molecular, cellular and organic) and functional point of view by observing their relations with the environment and other organisms, as well as their appearances in situations of environmental alteration.
- Ability to use biological knowledge obtained with this degree in a professional context by reasoning and presenting the ideas clearly, backed up and based on a solid general and specific education.

- B7 Collection of information about issues of biologic interest, analysis and emission of critical opinions and reason them including the reflection about social and/or ethical aspects related to the issue.
- B8 Ability to draft and write independent reports or projects related to the biological field. Communicate through verbal or written presentations and develop a logical argument in a professional context where it is shown skills acquired in this degree program.
- B9 Motivation to achieve innovative and proactive actions based on accomplished background from courses attended, background from current topics checked (I+D) (Research and Development, Environment, Biomedicine, Bio production...) and background obtained from internships made in the business network.
- B10 Development of analytic and abstraction skills, the intuition and the logical and rigorous thought through the study of biology and its uses.
- B11 Ability to communicate in detail and clearly: knowledge, methodology, ideas, issues and solutions to all audiences (not only qualified but unskilled in Biology).
- B12 Ability to identify their own educational necessities in the biology field and in concrete labour areas and to organize their learning with a high grade of autonomy in any context.
- C25 Gathering background information, develop experimental work and analysing data results
- C26 Participating in conducting, writing and producing projects on Biology
- C27 Developing and monitoring management systems and quality control on Biology
- C29 Helping and evaluating scientific, technical, ethical, legal and socioeconomically aspects related to Biology.
- C31 Knowing and handling technical and scientific apparatus.
- C32 Knowing and handling basic or specific key concepts and terminology
- C33 Understanding the social projection of Biology.
- D1 Development of capacity of analysis and synthesis
- D2 Acquisition of the organization and planning capacity for tasks and time
- D3 Development of oral and writting communication abilities
- D4 Acquisition of foreign language knowledge related to the study field
- D5 Use of computer resources related to the study field
- D6 Research and interpreting of information from different sources
- D7 Resolution of issues and decision making in an effective way
- D8 Development of the ability of independent learning
- D9 Ability to work in collaboration or creating groups with an interdisciplinary character
- D10 Development of the critical thinking
- D11 Adquisition of an ethical agreement with the society and the profession
- D12 Respectful behaviour to diversity and multiculturalism
- D13 Sensitivity for environmental issues
- D14 Adquisition of abilities in the interpersonal relationships
- D15 Development of creativity, initiative and enterpreneurial spirit
- D16 Acceptance of a quaility commitment
- D17 Development of the self-criticism ability
- D18 Development of negotiating power

| Learning outcomes | | | | | |
|--------------------------------------------------------------------------------------------------|----|----------------------------------|-----|-----|--|
| Expected results from this subject | | Training and Learning Results | | | |
| The aim of the Final Degree Project is that the student put knowledge and skills acquired during | | | | D1 | |
| the Degree into practice. | A2 | B2 | | D2 | |
| | А3 | В3 | | D3 | |
| | A4 | B4 | | D4 | |
| | Α5 | B5 | | D5 | |
| | | В6 | | D6 | |
| | | В7 | | D7 | |
| | | В8 | | D8 | |
| | | В9 | | D9 | |
| | | B10 | | D10 | |
| | | B11 | | D11 | |
| | | B12 | | D12 | |
| | | | | D13 | |
| | | | | D14 | |
| | | | | D15 | |
| | | | | D16 | |
| | | | | D17 | |
| | | | | D18 | |
| To apply knowledge, abilities and technologies of biology in aspects related to the development | A2 | B4 | C27 | D11 | |
| and implementation of management systems and quality control. | | B8 | | D16 | |
| | | B12 | | | |

| To obtain information, develop projects and interpret results. | A2 A3 | B1 B2 B7 B8 | C25 C26 | D2 D6 D7 D8 D11 D15 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------------|--------------------------|-------------------------------------------------|
| To participate in the direction, writing and execution of projects of biological scope. | A2 A5 | B1 B2 B4 B6 B8 B12 | C25 C26 C27 C33 | D2 D5 D6 D7 D9 D11 D15 D16 |
| To understand the social projection of biology and its impact on professional practice, as well as to know how to use knowledge to teach and disseminate. | A3 A4 | B7 B11 | C33 | D3 D11 |
| To apply the knowledge acquired for advising, supervise and assess scientific, technical, ethical, legal and socio-economic aspects related to biology. | A3 A4 | B6 B7 | C29 | D7 |
| To know and to handle concepts, terminology and scientific-technical instrumentation related to biology. | A4 | B4 | C31 C32 | D3 D4 D5 |

Contents

Topic

The Final Degree Project does not have its own contents. However, the details of its organization are indicated below.

The subject Final Project will be organized on the basis of three activities that the student will have to carry out appropriately:

1. Development of an original work related to one The type of project should be limited to these sections: of the multiple fields of biology or its professional application.

-Experimental work that is developed in the laboratorie

The work will be done under the supervision of a professor (tutor) assigned to this subject. There are different types of final degree project

for which students can choose:

-Type A: offered by professors of the degree. At the beginning of the academic year students must choose a project topic among those offered. The Final Degree Project Committee will establish the norms and deadlines that will govern the awarding to the students of the topics proposed by the professors.

application. -Experimental work that is developed in the laboratories of the faculty of The work will be done under the supervision of a Biology or in other UVigo research centers of biological scope.

-Theoretical development (design, planning, applicability) of a project of economic, social, environmental, educational interest, etc., related to the field of biology, or biology-based technology.

the beginning of the academic year students -Literature review projects whose objective is a possible practical must choose a project topic among those offered. application (initial study for a project, innovative case, etc.)

-Other projects corresponding to the offer of professors that do not specifically comply with the above modalities. They must be approved by the Final Degree Project Committee.

- Type B: proposed by students and agreed with a Work applied to biology carried out in external public and private professor of the degree who will supervise the institutions. work.
- -Type C: proposed by students to be carried out in institutions other than the UVIGO with which there is an agreement. This type of work will imply the existence of an academic tutor from the institution and a person from the external entity who will act as a co-tutor.
- -Type D: subject to students with special educational needs.
- -Type E: developed by students within the framework of a mobility program.

The particular characteristics of each of these types of work, as well as the rules that govern them, are included in the regulations of the Final Degree Project in Biology.

2. Delivery of a written report in time. It will be focus on the project carried out by the student.

The characteristics of the report and the deadlines for delivery will be established sufficiently in advance by the Final Degree Project Committee.

3. Presentation and defense of the work before anThe rules of presentation and defense of the project will be established by Evaluating Board that will evaluate and grade it. the Final Degree Project Committee, in agreement with the approved rules.

| Planning | | | | |
|---------------|-------------|-----------------------------|-------------|--|
| | Class hours | Hours outside the classroom | Total hours | |
| Mentored work | 20 | 400 | 420 | |
| Presentation | 1 | 29 | 30 | |

*The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

| Methodologies | |
|---------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | Description |
| Mentored work | The final degree project will be carried out under the supervision of a professor (tutor). |
| | His function will consist on supervising and guiding the student in the subject, methodology, elaboration, presentation and any other academic aspect related to the final project. |
| | The rules governing the tutorial function are included in the Regulations for the Final Degree Project of the University of Vigo and the Faculty of Biology. |

Presentation

The student must write a report on his/her work, which will be submitted in time to the Dean's Office of the Faculty, so that, through the coordinator of the subject, it will be available to the Evaluating Board.

Together with the report, the student must submit an application form to the defense of the project. This can be obtained from the student's web application (virtual secretariat) and after a suitability report from the student's tutor. The application deadlines will be communicated to the student during the course.

On the dates indicated, the student will make a presentation and defense of the final project in front of the Evaluating Board that will grade the work.

The rules for the elaboration of the report and the presentation to the Evaluating Board will be established with sufficient time in advance by the Final Degree Project Committee, in accordance with the regulations approved in the Faculty of Biology for this subject.

| Personalized assistance Methodologies Description | | | | |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| | | | | |
| Presentation | The student will have an academic supervisor to guide him/her during the presentation of his project to the Committee, in accordance with the regulations approved for this subject. | | | |

| Assessme | nt | | | |
|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-------------------------|-------|
| | Description | Qualification | Trainir Lear Res | ning |
| Mentored work | The supervisor will issue a tutorial evaluation report that includes different items aimed at assessing the acquisition of competences and skills by the student. The tutor's rubric model is approved by the Final Degree Project committee. The following link address to a model used in the 2021-22 academic course, which can serve as a reference for the 2022-23 academic course. http://bioloxia.uvigo.es/docs/docencia/grado/tfg/TFG_informe_tutor.pdf | 30 | B5 C | 26 D2 |
| Presentatio | on The Evaluation Board of the Final Degree Project will grade each work presented and defended individually. The grade will be unique and take into account the following aspects: -Report of work carried out by the student and delivered in due time and formOral presentation and defense of the work carried out by the student. An evaluation guideline will be available for this purpose. The model used in the 2021-22 academic course is available on the faculty website and can be used as reference for the 2022-23 academic course. http://bioloxia.uvigo.es/docs/docencia/grado/tfg/TFG_rubrica_evaluacion.pdf | | A1B7 C A4B8 A5B11 | |

Other comments on the Evaluation

End of Degree Project Evaluation Board

The Evaluation Board will be formed by three professors of the degree and will be appointed at the proposal of the Final Degree Project committee. As many boards as necessary will be formed, with their corresponding alternate members, to guarantee the proper development of the evaluation process.

End of Degree Project report

With sufficient tiem in advance, the Final Degree Project committee will establish the deadlines for the presentation and defense, as well as the delivery of a project report. Failure to subit the report within the established deadline will result in the non-presentation to the evaluation process.

Students will have a regulation for the elaboration and presentation of the report. For the 2022-23 academic year, these regulations will be available on the faculty website and on the teaching platform.

Presentation and defense of the Final Degree Project

The Evaluating Board will publish in advance the order of presentation, place and time of the evaluation sessions, which will be available to all students.

Grades

At the end of the evaluation process, the Evaluating Board will publish jointly the grades received by the students.

If a student passes the tutor's evaluation, but obtains a failing grade in any other section of the Final Degree Project, the examining board will provide the student and his/her tutor with a report containing recommendations for improving the work at the next opportunity. In particular, it will be emphasized if the negative grade obtained by the student can be recovered in a second opportunity in the same course or if, on the contrary, the student must complete the whole work in another academic year.

Second call (July)

The student may recover in a second opportunity of the same term those aspects that did not exceed in the first, as long as the report obtained by the evaluating board in the first opportunity so specified.

The Final Degree Project Committee will establish in advance the terms that will govern the evaluation process in the second opportunity. It will include the deadlines for the submission of the defense request and the tutor's report. It will also specify the date, place and time of the presentation and defense of the project.

Schedule

The final degree project does not have an established schedule; each student will establish their schedule according to the supervisor, usually during the second term of the academic year.

Dates scheduled for the evaluation in the 2022-23 academic year

Official dates were approved in the Faculty Board. See link: http://bioloxia.uvigo.es/es/docencia/examenes

Applicable regulations

The Final Degree Project Regulations of the University of Vigo, approved in "Consello de Goberno" is available at: http://www.uvigo.gal/opencms/export/sites/uvigo/uvigo_gl/DOCUMENTOS/alumnado/TFGNovo_Def_Uvigo.pdf

The Regulations of the Faculty of Biology for the completion of the Final Degree Project, approved in "Xunta de Facultade" is available at: http://bioloxia.uvigo.es/docencia/grado/tfg/normativa_TFG_facultad_biologia.pdf

Sources of information Basic Bibliography

Complementary Bibliography

Recommendations

Other comments

Recommendation for enrollment in the course:

- In order to apply to enroll in the Final Degree Project the student must have passed all the necessary credits to obtain the official degree title, except those corresponding to the project itself, either by passing the corresponding subjects or by recognition.

- In order to be able to apply for the presentation and defense of the Final Degree Project, the student should have passed all the necessary credits to obtain the degree, except those corresponding to the project itself, either by overcoming the corresponding subjects or by recognition.

Therefore, it is highly recommended that students register for this subject only if they have a certain security of being able to pass all the credits enrolled in the academic course.

Regulations of the Final Degree Project and information on the planning of the subject in the course are available at: http://bioloxia.uvigo.es/en/teaching/end-of-degree-project

Mobility programs:

Final degree projects can be carried out within a student mobility program, stating their characteristics in the respective study contract. Students who opt for this modality must have the approval of the mobility coordinator of the faculty and the coordinator of the subject Final Degree Project. Therefore, it is recommended that these processes be initiated sufficiently in advance.