

|                 |                                 | Teaching Guide         |            |           |
|-----------------|---------------------------------|------------------------|------------|-----------|
|                 | Identify                        | ying Data              |            | 2023/24   |
| Subject (*)     | Final Dissertation              |                        | Code       | 610G02046 |
| Study programme | Grao en Bioloxía                |                        | I          | I         |
|                 |                                 | Descriptors            |            |           |
| Cycle           | Period                          | Year                   | Туре       | Credits   |
| Graduate        | 2nd four-month period           | Fourth                 | Obligatory | 6         |
| Language        | SpanishGalicianEnglish          |                        |            |           |
| Teaching method | Face-to-face                    |                        |            |           |
| Prerequisites   |                                 |                        |            |           |
| Department      | BioloxíaFísica e Ciencias da Te | erraMatemáticasQuímica |            |           |
| Coordinador     |                                 | E                      | -mail      |           |



| Lecturers | Álvarez Bermúdez, María                              |
|-----------|--|
|           | Bao Casal, Roberto                                   |
|           | Barreiro Alonso, Aida Inés                           |
|           | Barreiro Lozano, Rodolfo                             |
|           | Becerra Fernandez, Manuel                            |
|           | Bernal Pita da Veiga, María de los Ángeles           |
|           | Blanco Calvo, Luis Alejandro                         |
|           | Cabeza Gras, Oscar                                   |
|           | Canle López, Moisés                                  |
|           | Castro Castro, Antonio Manuel                        |
|           | Cerdan Villanueva, Maria Esperanza                   |
|           | Cid Blanco, Angeles                                  |
|           | Couceiro López, Lucía                                |
|           | Cremades Ugarte, Javier                              |
|           | Díaz Prado, María Luz                                |
|           | Diaz Varela, Jose                                    |
|           | Domínguez Pérez, Montserrat                          |
|           | Estevez Perez, Maria Graciela                        |
|           | Fagúndez Díaz, Jaime                                 |
|           | Fernández Rodríguez, Nuria                           |
|           | Fernández Trillo, Francisco                          |
|           | Folgueira Otero, Mónica                              |
|           | Freire Picos, María Ángeles                          |
|           | Fuentes Lopez, Marcelino                             |
|           | Galan Regalado, Pedro Manuel                         |
|           | Gonzalez Siso, Maria Isabel                          |
|           | Gonzalez Tizon, Ana Maria                            |
|           | Grandal D'Anglade, Aurora                            |
|           | Insua Pombo, Ana Maria                               |
|           | Jacome Pumar, Maria Amalia                           |
|           | Jimenez Gonzalez, Carlos                             |
|           | Lamas Criado, Iban                                   |
|           | Lamas Maceiras, Mónica                               |
|           | López Cheda, Ana                                     |
|           | Martín Pérez, Jaime<br>Martínez Abraín, Alejandro    |
|           |  |
|           | Martinez Lage, Andres<br>Martinez Martinez, M. Luisa |
|           | Moncunill Solé, Blanca                               |
|           | Morenilla Burlo. Luis                                |
|           | Muiño Boedo, Ramon Jose                              |
|           | Naveira Fachal. Horacio                              |
|           | Parapar Vegas, Julio                                 |
|           | Pardo Vázquez, José Luis                             |
|           | Pimentel Pereira, Manuel                             |
|           | Piñeiro Portela. Rosalía                             |
|           | Poza Domínguez, Margarita                            |
|           | Prieto Aneiros, Andrés                               |
|           | Rey Rico, Ana  |
|           | Rioboo Blanco, Carmen                                |
|           |  |



E-mail

Rodriguez Belmonte, Esther Rodriguez Gonzalez, Jaime Rodríguez Roiloa, Sergio Ruiz De la Rosa, Jose Miguel Sahuquillo Balbuena, Elvira Santos Fidalgo, Luisa Segade Zas, Luisa Maria Servia García, María José Silvar Pereiro, Cristina Torrado Blanco, Laura Torres Vaamonde, Jose Enrique Vaamonde García, Carlos Valdiglesias García, Vanessa Vidal Vázquez, Eva Vila Sanjurjo, Antón Vila Taboada, Marta Vizoso Vázquez, Ángel José Yañez Sanchez, Julian

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esther.belmonte@udc.es jaime.rodriguez@udc.es sergio.roiloa@udc.es jose.miguel.ruiz.delarosa@udc.es elvira.sahuquillob@udc.es luisa.santos@udc.es luisa.segade@udc.es maria.servia@udc.es c.silvar@udc.es laura.torrado@udc.es enrique.torres@udc.es carlos.vaamonde.garcia@udc.es vanessa.valdiglesias@udc.es eva.vidal.vazquez@udc.es anton.vila@udc.es marta.vila.taboada@udc.es a.vizoso@udc.es julian.yanez@udc.es



| Web                 | http://ciencias.udc.es/estudos/grao-en-bioloxía/organización-docente  |
|---------------------|---|
| General description | For the Final Dissertation of the Degree in Biology, each student must individually carry out a project under the supervision |
|                     | of one or two teachers/professionals (at least one of the supervisors must belong to one of the Departments which             |
|                     | participates in the Degree of Biology). The topic of the project should be related to the contents of the Degree. This Final  |
|                     | Dissertation is compulsory and a fundamental part of the scientific development of the student, and she/he should be          |
|                     | involved in all the stages of the project.  |

|      | Study programme competences  |
|------|--|
| Code | Study programme competences  |
| B1   | Aprender a aprender.   |
| B2   | Resolver problemas de forma efectiva.  |
| B3   | Aplicar un pensamento crítico, lóxico e creativo.  |
| B4   | Traballar de forma autónoma con iniciativa.  |
| B5   | Traballar en colaboración.   |
| B6   | Organizar e planificar o traballo.   |
| B7   | Comunicarse de maneira efectiva nunha contorna de traballo.  |
| B8   | Sintetizar a información.  |
| B9   | Formarse unha opinión propia.  |
| B10  | Exercer a crítica científica.  |
| B11  | Debater en público.  |
| B12  | Adaptarse a novas situacións.  |
| B13  | Comportarse con ética e responsabilidade social como cidadán e como profesional.   |
| C1   | Expresarse correctamente, tanto de forma oral coma escrita, nas linguas oficiais da comunidade autónoma.                               |
| C2   | Dominar a expresión e a comprensión de forma oral e escrita dun idioma estranxeiro.  |
| C3   | Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e |
|      | para a aprendizaxe ao longo da súa vida.   |
| C4   | Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida, democrática e solidaria, capaz de analizar a      |
|      | realidade, diagnosticar problemas, formular e implantar solucións baseadas no coñecemento e orientadas ao ben común.                   |
| C5   | Entender a importancia da cultura emprendedora e coñecer os medios ao alcance das persoas emprendedoras.                               |
| C6   | Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.      |
| C7   | Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida.   |
| C8   | Valorar a importancia que ten a investigación, a innovación e o desenvolvemento tecnolóxico no avance socioeconómico e cultural da     |
|      | sociedade.   |

| Learning outcomes   |       |          |     |
|---|-------|----------|-----|
| Learning outcomes   | Study | y progra | mme |
|   | COI   | mpeten   | ces |
| By completing his/her final dissertation, the student will acquire all the basic and general competencies of the degree (type B), |       | B1       | C1  |
| as well as some specific competencies (type A), depending on the characteristics of the project. Institutional (or transversal,   |       | B2       | C2  |
| type C) competencies are also considered in this final dissertation, although the nature of the project will determine which ones |       | B3       | C3  |
| and to what degree.   |       | B4       | C4  |
|   |       | B5       | C5  |
|   |       | B6       | C6  |
|   |       | B7       | C7  |
|   |       | B8       | C8  |
|   |       | B9       |     |
|   |       | B10      |     |
|   |       | B11      |     |
|   |       | B12      |     |
|   |       | B13      |     |



|                                    | Contents   |
|------------------------------------|--|
| Торіс                              | Sub-topic  |
| Final dissertation (project) topic | A list of the available projects for the year will be published by the end of the second |
|                                    | semester of the previous term. The number of projects will depend on the number of       |
|                                    | enroled students and available teachers. The topics of the projects will be in line with |
|                                    | the learning outcomes of the degree in Biology, as well as with its competences and      |
|                                    | skills.  |

|                             | Planning            |                |                    |             |
|-----------------------------|---------------------|----------------|--------------------|-------------|
| Methodologies / tests       | Competencies        | Ordinary class | Student?s personal | Total hours |
|                             |                     | hours          | work hours         |             |
| Introductory activities     | B6 C1 C3 C6         | 1              | 0                  | 1           |
| Research (Research project) | B1 B2 B3 B4 B5 B6   | 39             | 39                 | 78          |
|                             | B8 B9 B10 B12 B13   |                |                    |             |
|                             | C1 C2 C4 C5 C7      |                |                    |             |
| Critical bibliographical    | B1 B3 B6 B8 B10 B13 | 1              | 15                 | 16          |
|                             | C1 C2 C3 C6         |                |                    |             |
| Summary                     | B1 B2 B3 B4 B6 B7   | 0              | 40                 | 40          |
|                             | B8 B9 B10 B12 B13   |                |                    |             |
|                             | C1 C2 C8            |                |                    |             |
| Oral presentation           | B3 B6 B7 B8 B10 B11 | 1              | 8                  | 9           |
|                             | B12 B13 C1 C2 C3    |                |                    |             |
|                             | C4                  |                |                    |             |
| Personalized attention      |                     | 6              | 0                  | 6           |

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

|                         | Methodologies  |
|-------------------------|--|
| Methodologies           | Description  |
| Introductory activities | Initial activities of the final dissertation. The student will be introduced to the structure and topic of their project. They will be |
|                         | given specific instructions on methodology and information sources.  |
| Research (Research      | The student will identify and analyse the research question or problem on which the project is based. They will have to                |
| project)                | establish the right procedures to solve the questions/problems, as well as analyse the obtained results and draw the right             |
|                         | conclusions. The precise methods applied by the student will largely depend on the type of final dissertation the student is           |
|                         | writing, within the several possibilities contemplated for the Biology Degree under the regulations of the Faculty of Science.         |
| Critical                | The student will obtain and critically use the most relevant bibliographic information for the topic of their final dissertation.      |
| bibliographical         |  |
| Summary                 | The student will summarize the main results and conclusions of their project in a report written following the regulations             |
|                         | established by the University of A Coruña and the Faculty of Sciences (see step 7, assessment, in this teaching guide). These          |
|                         | regulations are available in http://ciencias.udc.es/organizacion-docente   |
| Oral presentation       | The defense of the final dissertation will be open to the public. The student will present their results during a maximum period       |
|                         | of 15 minutes (the recommended duration of the defense is 10 minutes), followed by a discussion with the members of the                |
|                         | evaluation committee.  |
|                         |  |

|               | Personalized attention |  |
|---------------|------------------------|--|
| Methodologies | Description            |  |



| Oral presentation       | The supervisor or supervisors will guide the student throughout the process of conducting their final dissertation project. |
|-------------------------|---|
| Introductory activities |   |
| Research (Research      |   |
| project)                |   |
| Critical                |   |
| bibliographical         |   |
| Summary                 |   |
|                         |   |

|                   |                     | Assessment  |               |
|-------------------|---------------------|---|---------------|
| Methodologies     | Competencies        | Description   | Qualification |
| Oral presentation | B3 B6 B7 B8 B10 B11 | In theis assessment, the members of the evaluation committee will consider the            | 70            |
|                   | B12 B13 C1 C2 C3    | quality of the written report and the oral presentation, as well as different             |               |
|                   | C4                  | competencies included in the final dissertation rubric.                                   |               |
| Summary           | B1 B2 B3 B4 B6 B7   | The supervisor or supervisors will assess the quality and contents of the written report, | 30            |
|                   | B8 B9 B10 B12 B13   | as well as the different competencies included in the final dissertation rubric.          |               |
|                   | C1 C2 C8            |   |               |

Assessment comments



GENERAL CONSIDERATIONSSubmission of the reportAll information related to the submission of the Final Dissertation report is included in the Procedemento

de oferta, adxudicación e defensa dos Traballos de Fin de Grao, available at the Faculty of Sciences website (Traballos de Fin de Grao section).

Formatting requirements for the final (written) report

The final report of the Final Dissertation must be signed by the supervisor or supervisors. It is important to consider, though, that this will never be a substitute for the official authorisation of the defense signed in the "secretaría virtual" by, at least, one of the the supervisor/s.

The final report must include, at least, a summary with key words, an introduction to the topic, a section or chapter setting out the aims of the project, a section describing the materials, methods and experimental procedures (if any), a description of the obtained results, a discussion or critical analysis of the results, the conclusions of the project (if any) and the bibliographic references used. In addition to all this, at least the summary and the conclusions should be written in english (as well as in galician and spanish).-The format of the report will also be evaluated, and it must conform to the following basic requirements:

1. Title page. A compulsory title page model can be downloaded from the Faculty of Science website (Traballos de Fin de Grao section)

2. Maximum 25 pages, not including the cover, the supervisor signature page, the summary and the index.

3. Margins not below 2 cm (top, bottom, left and right)

4. Body text: Arial (or equivalent), 12 points / Captions and headings in figures and tables: not less than 10 points

5. Single to 1,5 lines spacing

6. Annexes (graphics/tables/extra figures) may be added if necessary

-The supervisor or supervisors will decide whether they want to use plagiarism detection software or not, although the use of turnitin is strongly recommended. The reports not analysed using turnitin can be presented, although they will not be included in the institutional repository of the University of A Coruña (RUC)

Requirements for the oral presentation1.

The student will present the aims, methodology, contents and conclusions (if any) of their project in a maximum time of 15 minutes (10 minutes is strongly recommended). The evaluation committee will inform the student of the available time at the beginning of the defence.

2. After the project is presented by the student, they will discuss their results with the evaluation committee. Members of the committee will make all the comments and questions they consider relevant. A maximum time of 5 minutes per member of the committee is strongly recommended. The discussion of the Final Dissertation should not last for more than 20 minutes. Refusing to answer the committee's questions will cause the Final Dissertation to be assessed with a qualification of 4 points or less.

3. The oral presentation of the work can be conducted online when circumstances make on-site presentation unadvisable. The student can also request for the presentation of their work to be carried out online when there are compelling reasons, but this will always have to be granted by the Dean.

## Assessment considerations

The assessment of the Final Dissertation is the responsability of the evaluation committee. After the Final Dissertation has been submitted and presented, the evaluation committee will assess the student's work. The grade of the Final Dissertation will be the arithmetic mean of the marks given by each member of the evaluation committee, always taking into account the assessment made by the supervisor/s of the student (30% of the final grade).

Students whose grade in the Final Dissertation is 9 or above are elegible for a distinction (Matrícula de Honra), always depending on the evaluation committee's criteria.

Students who fail their Final Dissertation will receive a document produced by the evaluation committee with its recommendations for the improvement of the report. A copy of said document will also be submitted to the supervisor/s of the work.

Students can appeal their Final Dissertation grades following the process described in the UDC assessment regulations (article 31, Normativa de Avaliación, Revisión e Reclamación das Cualificacións dos Estudos de Grao e Mestrado Universitario).

Enrollment allows the student to submit and present their Final Dissertation report in the two opportunities included in each term, always according to the UDC regulations. Students who fail to pass their Final Dissertation (or absent themselves) in the two opportunities included in each term will have to re-enroll. They will not need to choose a different topic for their Final Dissertation, as long as there is agreement between the student and the supervisor/s and the student requests it.

Sources of information



| Basic   | O director ou directores proporán os recursos bibliográficos que consideren máis axustados para cada traballo de fin  |
|---|---|
|   | de grao.  |
| Complementary   |   |
|   |   |
|   | Recommendations   |
|   | Subjects that it is recommended to have taken before  |
|   |   |
|   | Subjects that are recommended to be taken simultaneously  |
|   |   |
|   | Subjects that continue the syllabus   |
|   |   |
|   | Other comments  |
| The student needs to pa   | ass courses representing 234 ECTS credits before being able to defend their final dissertation. Green Campus Science Faculty  |
| ProgramTo contribute to   | o achieve an immediate sustainable environment  |
| and comply with point 6   | of the "Environmental Declaration of the Faculty  |
| of Coloness (0000) #  |   |
| of Sciences (2020), the   | e documentary works carried out in this subject:- They will be requested mostly in virtual format and   |
| ( ), :  |   |
| electronic form If it is p  | e documentary works carried out in this subject:- They will be requested mostly in virtual format and   |
| electronic form If it is p<br>Double-sided prints will  | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>printed: - Plastics will not be used   |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation  | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>printed: - Plastics will not be used<br>be made Recycled paper will be used Drafts will  |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation<br>university teaching, the  | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>printed: - Plastics will not be used<br>be made Recycled paper will be used Drafts will<br>n of the gender perspective- As stated in the various applicable regulations for  |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation<br>university teaching, the<br>subject (using non-sexis  | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>winted: - Plastics will not be used<br>be made Recycled paper will be used Drafts will<br>n of the gender perspective- As stated in the various applicable regulations for<br>gender perspective must be integrated into this  |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation<br>university teaching, the<br>subject (using non-sexis<br>genders, encouraging th   | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>printed: - Plastics will not be used<br>be made Recycled paper will be used Drafts will<br>n of the gender perspective- As stated in the various applicable regulations for<br>gender perspective must be integrated into this<br>st language, using bibliography from authors of both   |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation<br>university teaching, the<br>subject (using non-sexis<br>genders, encouraging th<br>classroom) Efforts wi                              | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>wrinted: - Plastics will not be used<br>be made Recycled paper will be used Drafts will<br>n of the gender perspective- As stated in the various applicable regulations for<br>gender perspective must be integrated into this<br>at language, using bibliography from authors of both<br>he participation of male and female students in  |
| electronic form If it is p<br>Double-sided prints will<br>be avoided.Incorporation<br>university teaching, the<br>subject (using non-sexis<br>genders, encouraging th<br>classroom) Efforts wi<br>and attitudes, and the en | e documentary works carried out in this subject:- They will be requested mostly in virtual format and<br>winted: - Plastics will not be used<br>be made Recycled paper will be used Drafts will<br>n of the gender perspective- As stated in the various applicable regulations for<br>gender perspective must be integrated into this<br>st language, using bibliography from authors of both<br>he participation of male and female students in<br>ill be made to identify and modify sexist biases |

(\*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.