



| Teaching Guide           |   |        |   |         |
|--------------------------|---|--------|---|---------|
| Identifying Data         |   |        |   | 2021/22 |
| Subject (*)              | Work Placement  | Code   | 610441022s  |         |
| Study programme          | Máster Universitario en Bioloxía Molecular, Celular e Xenética (semipresencial)   |        |   |         |
| Descriptors              |   |        |   |         |
| Cycle                    | Period  | Year   | Type  | Credits |
| Official Master's Degree | 2nd four-month period   | First  | Optional  | 6       |
| Language                 | Spanish   |        |   |         |
| Teaching method          | Hybrid  |        |   |         |
| Prerequisites            |   |        |   |         |
| Department               | BioloxíaCiencias da Computación e Tecnoloxías da InformaciónFisioterapia, Medicina e Ciencias Biomédicas  |        |   |         |
| Coordinador              | Cerdan Villanueva, Maria Esperanza  | E-mail | esper.cerdan@udc.es   |         |
| Lecturers                | Arufe Gonda, María del Carmen<br>Cerdan Villanueva, Maria Esperanza<br>Dorado de la Calle, Julian<br>Folgueira Otero, Mónica<br>Gonzalez Siso, Maria Isabel<br>Insua Pombo, Ana Maria<br>Rioboo Blanco, Carmen<br>Silvar Pereiro, Cristina  | E-mail | maria.arufe@udc.es<br>esper.cerdan@udc.es<br>julian.dorado@udc.es<br>m.folgueira@udc.es<br>isabel.gsiso@udc.es<br>ana.insua@udc.es<br>carmen.rioboo@udc.es<br>c.silvar@udc.es |         |
| Web                      | <a href="http://ciencias.udc.es/MBMCG/">http://ciencias.udc.es/MBMCG/</a>   |        |   |         |
| General description      | <p>External practices constitute a period of apprenticeship in companies and institutions .</p> <p>Coordinates the external practices Esperanza Cerdán Villanueva.</p> <p>Although only appear in the application as teachers those who participated in external practices in the previous year, all teachers officially associated with the Master BMCG can participate as academic tutors of external practices, and each company appoints for each student a tutor in company.</p>   |        |   |         |
| Contingency plan         | <p>If, due to a state of alarm caused by COVID19 or due to security restrictions imposed by companies and institutions, it is not possible to assign external practices to students in the 2020-21 academic year, there are two situations:</p> <p>a) That companies and institutions can offer online practices that would be evaluated by the same criteria as face-to-face practices, without changing other aspects related to teaching and monitoring.</p> <p>b) That the external practices be replaced by 2 optional subjects, changing the student's enrollment, in which case the contingency plans foreseen in the selected subjects would be applied</p> |        |   |         |

| Study programme competences |  |
|-----------------------------|--|
| Code                        | Study programme competences  |
| A1                          | Skills of working in a sure way in the laboratories knowing operation handbooks and actions to avoid incidents of risk.  |
| A2                          | Skills of using usual techniques and instruments in the cellular, biological and molecular research: that are able to use techniques and instruments as well as understanding potentials of their uses and applications. |
| A3                          | Skills of understanding the functioning of cells through the structural organization, biochemistry, gene expression and genetic variability.   |
| A8                          | Skills of having an integrated view of the previously acquired knowledge about Molecular and Cellular Biology and Genetics, with an interdisciplinary approach and experimental work.                                    |
| A13                         | Skills to become a professional in health, pharmacy, veterinary, animal production, biotechnology or food sectors.   |
| B2                          | Skills of decision making for the problem solving: that are able to apply theoretical knowledges and practical acquired in the formulation of biological problems and the looking for solutions.                         |
| B4                          | Organization and work planning skills: that are able to manage the use of the time as well as available resources and to organize the work in the laboratory.  |
| B6                          | Skills of team work: that are able to keep efficient interpersonal relationships in an interdisciplinary and international work context, with respect for the cultural diversity.  |



|     |   |
|-----|---|
| B7  | Personal progress skills : that are able to learn from freelance way, adapting to new situations, developing necessary qualities as the creativity, skills of leadership, motivation for the excellence and the quality.  |
| B12 | That students are able to integrate knowledge and face the complexity of formulating judgments based on information, which, being incomplete or limited, includes reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments |
| C1  | Ability to express oneself correctly, both orally and in writing, in the official languages of the autonomous community   |
| C2  | Ability to know and use appropriately the technical terminology of the field of knowledge of the master, in the native language and in English, as a language of international diffusion in this field  |
| C3  | Using ICT in working contexts and lifelong learning.  |
| C4  | Acting as a respectful citizen according to democratic cultures and human rights and with a gender perspective.   |
| C5  | Understanding the importance of entrepreneurial culture and the useful means for enterprising people.   |
| C6  | Acquiring skills for healthy lifestyles, and healthy habits and routines.   |
| C7  | Developing the ability to work in interdisciplinary or transdisciplinary teams in order to offer proposals that can contribute to a sustainable environmental, economic, political and social development.  |
| C8  | Valuing the importance of research, innovation and technological development for the socioeconomic and cultural progress of society.  |
| C9  | Ability to manage times and resources: developing plans, prioritizing activities, identifying critical points, establishing goals and accomplishing them.   |

| Learning outcomes  |                             |     |     |
|--|-----------------------------|-----|-----|
| Learning outcomes  | Study programme competences |     |     |
| External practices contribute to the training of students towards their subsequent professional integration and enable access to learning techniques , protocols , skills and attitudes necessary for training and professional integration. | AR1                         | BR2 | CC1 |
|  | AR2                         | BR4 | CC2 |
|  | AR3                         | BR6 | CC3 |
|  | AR8                         | BR7 | CC4 |
|  | AR13                        | BC3 | CC5 |
|  |                             |     | CC6 |
|  |                             |     | CC7 |
|  |                             |     | CC8 |
|  |                             |     | CC9 |

| Contents  |           |
|---|-----------|
| Topic   | Sub-topic |
| Once each student has been assigned to a company / institution, the tutor in the company will prepare a descriptive plan of the practical work and methodology. This plan will also include the timetables for the implementation of practices and methods of supervision by the tutor of the company. There is a standard form available on the website of Master BMCG . |           |

| Planning                |                               |                      |                               |             |
|-------------------------|-------------------------------|----------------------|-------------------------------|-------------|
| Methodologies / tests   | Competencies                  | Ordinary class hours | Student?s personal work hours | Total hours |
| Introductory activities | A13 B2 B7 C1 C3 C4<br>C8      | 3                    | 0                             | 3           |
| Document analysis       | A8 B12 C2                     | 0                    | 98                            | 98          |
| Laboratory practice     | A1 A2 A3 B4 B6 C5<br>C6 C7 C9 | 90                   | 0                             | 90          |
| Summary                 | A8 C3                         | 2                    | 30                            | 32          |



|   |  |   |   |   |
|---|--|---|---|---|
| Personalized attention  |  | 2 | 0 | 2 |
| (*)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 | Interview and presentation of training plan. The academic tutor will supervise the student practices and procedures as well as informs necessary for the realization of external practices.  |
| Document analysis       | Analysis of literature and protocols necessary for the implementation of practices and understanding of its various applications to the solution of problems and the development of ideas for innovation.  |
| Laboratory practice     | This methodology refers to practical work in the company / institution and its specific development for each case will be proposed by the tutor in the company.  |
| Summary                 | The student will develop a memory in which techniques and procedures developed during their stay in the company are collected and their personal assessment of the application of this knowledge to solve problems related to the fields of application of the Master and its potential for business development . There is a type format available on the website of the Master . |

| Personalized attention             |   |
|------------------------------------|---|
| Methodologies                      | Description   |
| Introductory activities<br>Summary | The academic tutor will guide students in their choice of practical work and how to prepare and submit the written summary. |

| Assessment          |                               |  |               |
|---------------------|-------------------------------|--|---------------|
| Methodologies       | Competencies                  | Description  | Qualification |
| Laboratory practice | A1 A2 A3 B4 B6 C5<br>C6 C7 C9 | The tutor in the company makes a report on the skills developed by the student.  | 50            |
| Summary             | A8 C3                         | The student makes a report on the external practices that must be made ??with the approval of the company tutor and academic supervisor. There is a standard form of memory that is available to students on the website of the Master .<br><br>The academic tutor assesses the report of the tutor in the company and the report submitted by the student and in turn issued a report with a recommendation rating. | 50            |

| Assessment comments   |
|---|
| <p>The overall process of assessing the PEX is based on three processes</p> <p>a) The report by the tutor of the company</p> <p>b) The report prepared by the academic tutor who assesses the report of the company tutor and memory prepared by the student</p> <p>c) The joint evaluation by the Commission of the Degree of the evidence collected in a) and b )</p> |

| Sources of information |  |
|------------------------|--|
| Basic                  | Específico para cada actividade será indicado ao alumno polo titor da empresa. |
| 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

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To contribute to achieving an immediate sustainable environment and comply with point 6 of the &quot;Environmental Declaration of the Faculty of Sciences (2020)&quot;, the documentary work carried out in this area:

They will be requested mostly in virtual format and computer support.&lt;/pre&gt;&lt;/div&gt;

**(\*)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.**