Prerequisites

As a requirement to be admitted the student must possess one of the following degrees: Any degree in the field of Health Sciences (Veterinary, Medicine, Infirmary, Food Science, Animal Science, Animal Health, Public Health, Biomedicine, Psychology…) or Life Sciences (Biology, Biochemistry, Biotechnology, Bioinformatics, Zoology, Botany, Ecology, Biotechnology, Biodiversity, Agronomics, Environmental Sciences…) or similar.

Objectives and Contextualisation

Final Master Dissertation (TFM) will consist in a specific project related or linked with a research group, an institution, or a company where the student will be able to apply in a particular case the knowledges, abilities and aptitudes acquired during the master. TFM will be carried out under the supervision of a tutor (one of the professors of the Master) that will advise and help to solve the problems that the student will face during such process. Once the TFM is finished it will be presented and defended in a public session in front of a committee of evaluation.

Competences

- Act in accordance with the code of ethics of the profession.
- Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
- Continue the learning process, to a large extent autonomously.
- Design, plan and carry out a research project on zoonotic agents, based on the vision of One Health.
- Generate innovative and competitive proposals for professional activity and research.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Take decisions on the establishment of zoonosis surveillance and containment plans.
- Work alone or in a multidisciplinary team within the area of study, showing critical reasoning and creativity, and the ability to analyse, interpret and synthesise the data generated.
Learning Outcomes

1. Carry out an experimental design and/or suitable statistical data processing.
2. Comply with the profession's code of practice during the research project and in relation to work colleagues.
3. Conduct professional activity in compliance with its code of practice.
4. Discuss findings before an examining board.
5. Display the capacity of integration into the research team.
6. Display the capacity to integrate into the research team and engage in multidisciplinary collaboration towards the completion of the master's dissertation.
7. Draw up new hypotheses or programmes for the containment or prevention of zoonoses based on the general vision of One Health.
8. Implement surveillance and containment plans for specific or real cases.
9. Make an oral presentation of the work performed.
10. Organise and maintain a digital file with the data, protocols, analytical methods, etc. generated.
11. Perform correct and thorough bibliographic research for the assignment or topic to be resolved, using the resources learned.
12. Perform practical assignments using standard work procedures (SWP) and laboratory good practice.
13. Prepare a written report on the work done and the results obtained, following the established authorship norms.
14. Prepare and distribute data compilation templates and specific/detailed calendars for the activities to be carried out.
15. Present the decisions taken when facing specific situations or real cases.
16. Use the methodology of science research, applying the knowledge of One Health acquired and resolve the issues arising in this work.
17. Work alone or in a multidisciplinary team within the area of study, showing critical reasoning and creativity, and the ability to analyse, interpret and synthesise the data generated.

Content

TFM can be of different nature: experimental, bibliographic or applicative and it will have three stages:

1. Planification Stage: the student, after a brief phase of preliminary documentation and, advised by its supervisor, must formalize the objective of its work and will design a plan of activities that will be presented during the preliminary evaluation session, held just before that the student begin its activities.
2. Development stage: the student will face the realization of his/her TFM according its stablished work plan.
3. Defense stage: The student will elaborate a written dissertation that will be presented and defended orally in a public session in front of the TFM's evaluation committee.

Methodology

Teaching methodology used will vary depending on the nature of each TFM. Basically we will follow the following steps:

Directed activities

Informative session

Preliminary evaluation session

Supervised activities

Tutorials

Autonomous activities
Bibliographic research
Reading papers
Cooperative learning
Carrying out works
Carrying out practical duties
Writing the master dissertation
Defense of the TFM
Personal study
Participation in other activities

**Activities**

<table>
<thead>
<tr>
<th>Title</th>
<th>Hours</th>
<th>ECTS</th>
<th>Learning Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type: Directed</td>
<td></td>
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<td></td>
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<tr>
<td>Informative session</td>
<td>1</td>
<td>0.04</td>
<td>7, 16</td>
</tr>
<tr>
<td>Preliminary evaluation session</td>
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<td>0.1</td>
<td>4, 7, 9, 15, 16</td>
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<tr>
<td>Type: Supervised</td>
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<td></td>
<td></td>
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<tr>
<td>Tutorial</td>
<td>15</td>
<td>0.6</td>
<td>5, 7, 9, 13, 16</td>
</tr>
<tr>
<td>Type: Autonomous</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Bibliographic research and paper reading</td>
<td>40</td>
<td>1.6</td>
<td>11</td>
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<tr>
<td>Carrying out Works, practical duties and other activities</td>
<td>210</td>
<td>8.4</td>
<td>2, 6, 5, 3, 7, 8, 10, 14, 12, 1, 17, 16</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>30</td>
<td>1.2</td>
<td>6, 5, 7, 8, 14, 12, 1, 17, 16</td>
</tr>
<tr>
<td>Exposition and defense of the TFM</td>
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<td>0.03</td>
<td>4, 9, 15</td>
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<tr>
<td>Personal study</td>
<td>40</td>
<td>1.6</td>
<td>2, 3, 7, 1, 17, 16</td>
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<tr>
<td>Writting the TFM dissertation</td>
<td>35</td>
<td>1.4</td>
<td>15, 10, 13</td>
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</tbody>
</table>

**Assessment**

The Student must present a written dissertation that will be defended in a public session. The student's advisor will present an evaluation report on the student's performance that will suppose a 30% of the final qualification. The student must attend, at least, a 50% of the defenses of the rest of his/her colleagues to be considered apt to be evaluated. If the written dissertation is not delivered in time or the student does not presents to the defense or he/she does not attend, at least, a 50% of the defenses of the rest of his/her colleagues, such TFM will be considered as "non evaluable"
<table>
<thead>
<tr>
<th>Title</th>
<th>Weighting</th>
<th>Hours</th>
<th>ECTS</th>
<th>Learning Outcomes</th>
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<td>Advisor's report</td>
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</tbody>
</table>

**Bibliography**

Bibliography consulted will vary depending on the nature of each TFM