

66863 - Laboratory Animal Science

Syllabus Information

Academic year: 2024/25

Subject: 66863 - Laboratory Animal Science

Faculty / School: 105 - Facultad de Veterinaria

Degree: 617 - Master's in Global Health: Integration of Environmental, Human and Animal Health

ECTS: 6.0

Year: 1

Semester: Annual

Subject type: Optional

Module:

1. General information

The objective of the subject is to provide the students with the adequate theoretical training to perform and design animal experimentation procedures, equivalent to functions a, b, c and d, of the Order ECC/566/2015. To obtain recognition of the training course, once the requirements have been met, a form must be completed and sent to the Secretariat of the Faculty of Veterinary Medicine, available at: [Certificado de capacitación para manejo de animales de experimentación | Facultad de Veterinaria \(unizar.es\)](https://www.unizar.es). After obtaining recognition of the training course, you can apply to the competent body for recognition of the official training. For functions a, b and c, the Work Under Supervision must be completed beforehand.

This objective is aligned with the following goals and Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>): 3.B and 3D (Goal 3), 4.4. (Goal 4) and 9.5 (Goal 9).

This subject is recommended for students who have completed a degree in Biology (animal), Medicine, Veterinary Medicine or any other discipline that includes studies in animal biology and physiology. For students who have studied other degrees, it will be necessary to have a previous training of at least 20 hours in biology and animal physiology.

It is recommended that students have previously passed the subject "Quantitative Epidemiology and Advanced Statistics" of the master's degree.

2. Learning results

The student will acquire the adequate preparation and training to perform and design animal experimentation procedures, reaching a training level equivalent to functions a, b, c and d, included in directive 2010/63/EU and developed at state level by Order ECC/566/2015 of 20/03/2015, which establishes the training requirements to be met by personnel handling animals for experimental purposes. Annex I of this order describes in detail the learning results of each of the core and specific modules for each function (https://www.boe.es/diario_boe/txt.php?id=BOE-A-2015-3564)

3. Syllabus

- I.
 - I. National legislation
 - II. Ethics, animal welfare and the 3Rs
 - III. Basic and appropriate biology
 - IV. Fundamentals of animal biology and physiology
 - V. Animal care, health and management
 - VI. Recognising pain, suffering and anguish
 - VII. Bloodless methods of slaughter
 - VIII. Minimally invasive procedures without anesthesia
 - IX. Anesthesia for minor procedures
 - X. Advanced anesthesia for surgical interventions or prolonged procedures
 - XI. Principles of surgery
 - XII. Design of projects and procedures

4. Academic activities

- **Lectures (35 hours):** sessions where the teacher will explain the topics mentioned in the syllabus.
- **Practical classes (24 hours):** laboratory or computer classroom practice and visit to a research center.
- **Supervised work (13 hours):** work on the design of an experimental procedure.
- **Seminars (1 h):** presentation of the experimental design
- **Autonomous student work (75 hours)**
- **Assessment tests (2 hours)**

5. Assessment system

The subject will only be evaluated in the global assessment mode by means of the following activities:

Test 1. Assessment of theoretical and practical contents. This exam will consist of 25 multiple-choice questions on modules I-VI.

Test 2. Assessment of theoretical and practical contents. This exam will consist of 35 multiple-choice questions on modules VII-XI.

The multiple-choice questions will have 4 possible options with 1 correct answer. No points will be subtracted in case of incorrect answers. Both tests will be assessed on 10 final points. In order to obtain a grade equal to 5, it will be necessary to reach 60% of the maximum possible grade.

Test 3. Tutored work and class participation. The presentation, oral exposition and defence of the work done will be assessed. The maximum grade is 10 points. In order to weight this section with the rest, students must achieve a minimum of 5 points. In addition to the presentation, students should actively participate asking questions to their peers.

The sum of the grades of these three assessment activities will determine the final grade of the subject:

Final grade = 35% Test 1 + 45% Test 2 + 20% Test 3

6. Sustainable Development Goals

3 - Good Health & Well-Being

4 - Quality Education

9 - Industry, Innovation and Infrastructure