

28416 - External Morphology: Morphological Assessment and Identification

Syllabus Information

Academic Year: 2019/20

Subject: 28416 - External Morphology: Morphological Assessment and Identification

Faculty / School: 105 - Facultad de Veterinaria

Degree: 451 - Degree in Veterinary Science

ECTS: 3.0

Year: 2

Semester: First semester

Subject Type: Optional

Module: ---

1.General information

1.1.Aims of the course

The general aim of this course is to enable the students to properly assess the morphological quality and identity of pets and production animals, from genetic, clinical and zootechnical points of view. For this reason, the student must demonstrate the learning outcomes.

1.2.Context and importance of this course in the degree

The subject is on the second year, in the first semester, so it will have students who have had previous contact with Veterinary Sciences in general and with Zootechnics in particular. This course aims to deep and broad the concepts learned in Anatomy and Ethnology, with a focus essentially applied to the identification and morphological assessment of domestic animals.

The learning and critical evaluation of the morphological standards of the different animal breeds is a good introduction to the professional reality in the veterinary clinic and in livestock production, so that the subject plays an important role in the training of the future veterinarians.

1.3.Recommendations to take this course

It is a second year elective subject of the first semester. For an adequate learning of its contents it is necessary to have followed Embryology and Anatomy I and II and Ethnology and Animal Welfare, all of them first year subjects.

2.Learning goals

2.1.Competences

On successful completion of this course, students will be able to:

- Correctly identify animals and their products, in accordance with current legislation.
- Assess their health status on clinical examination. To give an opinion on its genetic quality and usefulness.
- Advise breeders on the most advisable crosses to improve the morphology of their specimens.
- Advise participants in contests and morphological exhibitions, and eventually act as a qualifying judge

2.2.Learning goals

If students complete the course successfully, they should be able to

- Know and apply the most appropriate animal identification methods in each case.
- Make a value judgment on the qualities and morphological defects of any important animal breed, in any domestic species.

2.3.Importance of learning goals

Appropriate knowledge and use of the various methods of animal identification are indispensable tools for the veterinarian in order to fulfill his tasks of ensuring the traceability of food intended for human consumption, safeguarding animal health, in particular in animal movements and in compulsory vaccination and sanitation campaigns, and helping to combat the illegal transport of animals and trafficking in protected species.

The ability to assess the suitability of animal morphology, according to age, sex and utility, is an important auxiliary tool for veterinary clinical judgment on the state of health or disease of an animal, collaborate in the numerous competitions and exhibitions of livestock and pets held throughout Spain, and advise breeders in their breeding programme, especially where external morphology is the main selective criterion, as in the case of companion animals, which sometimes leads to aberrations detrimental to animal welfare which it is the veterinarian's duty to help prevent.

In addition to the learning and acquisition of previously mentioned competences, students will be able to understand and take better advantage of other subjects that will go throughout their studies, both in the area of Clinical Sciences (especially Medical Pathology and Propedeutics and Clinical Practicum), as well as in the zootechnical subjects of Genetics, and those of Integration in Animal Health and Production of the different livestock species.

3. Assessment (1st and 2nd call)

3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student will have to demonstrate that has reached the learning results foreseen in the evaluation of the different competences:

- The knowledge and understanding of the theoretical contents will be assessed with a multiple-choice question test.
- Practical skills will be assessed using a variety of methodologies:
- Attendance at the practical sessions will be controlled and computable.
- The teachers will be able to assess them at the end of the practical sessions by means of a simple test and/or the presentation of cases prepared in students' groups.
- Practical exercises will be included in the ADD for self-assessment purposes and in some cases applicable to ongoing assessment.
- The field activities (equidae review, agility) will be assessed taking into account the attitude shown during the same and team work.
- For the contents related to morphological evaluation, a final practical examination will be carried out based on photographs to be commented on.

The assessment criteria shall be as follows:

Theoretical exam, up to 40 points out of 100.

Practical test, up to 30 points out of 100.

Resolution of cases in the classroom and/or ADD, up to 10 points out of 100. Team work, up to 20 points out of 100.

In order to pass the exam, it is necessary to obtain at least 50% of the possible points for the theoretical and practical contents as a whole (35 points out of 70), and not less than 40% of the possible points for each type of contents (16 and 12 points, respectively). The rest of the qualifications will apply only after this minimum has been achieved.

The subject is passed with a grade equal to or greater than 5 points.

Marking system:

According to the national regulation Law 1025/2003, 5th of September which lays down the European system of credits and marking system for the university degree.

0-4,9: FAIL.

5,0-6,9: PASS

7,0-8,9: GOOD (NT).

9,0-10: EXCELLENT (SB).

As the article 158 of the Statutes of the University of Zaragoza lays down, provisional grades will be displayed at least for 7 days and students will be able to review them on the date, time and place provided for that purpose.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

The learning process that has been designed for this subject is based on the following:

- On-site theoretical classes, in which the previously planned program will be developed, which will be available in the ADD, complemented with other teaching resources (CD, paper documentation).
- Practical classes in a morphological assessment classroom in different animal species. Practical classes in the classroom of methods of identification and recognition of the age of animals.
- Practical Session in Equestrian Center to make a complete review of the specimens.
- Practical session on Agility as a model of animal sports activity
- Performing a team work on the regulations of any sport related to any animal species
- Practical exercises through short-term tests in the classroom and / or the ADD.
- Visit to an exhibition or fair

4.2.Learning tasks

The program offered to the student to help achieve the expected results includes the following activities:

Theoretical classes in Classroom.

Practical classes in Classroom, participated with students. Practical classes in Equestrian Center.

Personal work (review, morphological evaluation of dairy cattle)

Teamwork, including public exposure

4.3.Syllabus

THEORETICAL PROGRAM

IDENTIFICATION

1. Identification. Traceability. Definitions. Identification and traceability in livestock. Areas involved and links. From the farm to the table. Standards of traceability in livestock in Spain. Legislation on bovine, ovine and caprine animals, equidae, and pigs.
2. The transport of animals. Loads and downloads. Legislation. Transport of animals in private vehicles
3. Identification of age: The dental table. Evolution and relation with chronological and physiological age in domestic species. Age in birds.
4. Development and age. Determination of age by general and regional analysis of the animal. Signs for the determination of age. Shape and proportions in young and adult animals. Body development in heterogeneous adult weight species.

MORPHOLOGY

1. External morphology. Body regions, brief review of the regional nomenclature. Aplomos: definition and general assessment. Defects with respect to lines 1 and 5. Defects with respect to lines 2 and 4. Defect with respect to line 3. Variation between species.
2. Introduction to morphological assessment. Definitions of beauty, defect, beauty and racial standard. General aspects of morphological assessment.
3. Types of morphological assessment. Comparison and Linear Qualification, utility and description in general and, specifically, dairy cattle.
4. Scorecards, utility and description. Conclusions.
5. Morphological evaluation in other companion animals. Physiological characteristics of lagomorphs (rabbit and hare), rodents (guinea pigs, chinchillas, hamsters and gerbils) and some carnivores (ferret) and their relationship to body shape and age.
6. The equine passport. Additional features

ANIMALS AND SPORTS

1. The horse in the sport. Breeds and modalities
2. Regulations of different tests: polo, jumps, horse races, etc.
3. Other sports involving animals: colombiculture, colombofilia, falconry, mushing
4. Agility

PRACTICAL PROGRAM

1. Identification. Identification by species. Cattle, sheep, goats, equines, pigs, dogs, cats and ferrets. Methods: eartags, passports, microchips.
2. Evaluation of horse tread.
3. The ideal udder.
4. The ideal cow.
5. Review in equines: Individual realization of a review, check and fix body regions, see layers and race
6. / fitness of some specimens.
7. Determination of age by studying dental arches in equines, cattle, sheep, pigs, dogs, cats and chinchillas. Age depending on the development of horns in cattle and sheep.
8. Rules for sporting events related to domestic animals
9. Agility as an example of a sports test

4.4.Course planning and calendar

Activity	Theoretical classes	Practical	Group size	teacher
IDENTIFICATION	6	3		
Animal identification	2	1	25	AA
Animal Transport	1	---	---	GM
Age	3	2	25	ML
MORPHOLOGY	6	5		
Body regions	1	---	---	CS
Morphological valuation in livestock	3	3	25	CS
Morphological valuation in pets	1	---	----	ML
Horses	1	2	8	ML JLO
ANIMAL and SPORTS	3	3		
Horse spots	2	1	---	GM
Other animal sports	1			AA
Agility	---	2	----	JE
Fairy trip		4		
TOTAL	15 (50%)	15 (50%)		

4.5. Bibliography and recommended resources

<http://psfunizar7.unizar.es/br13/egAsignaturas.php?codigo=28416>