

General information	
Academic subject	<b>Morphological and Functional Evaluation of Domestic Animals ( IC of Animal production II)</b>
Degree course	Animal Science
Academic Year	2021/2022
European Credit Transfer and Accumulation System (ECTS):	: 5
Language	Italian
Academic calendar (starting and ending date)	I semester
Attendance	Mandatory

Professor/ Lecturer	
Name and Surname	Pasquale De Palo (lectures) Aristide Maggiolino (training)
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Telephone	0804679919
Department and address	Veterinary Medicine Campus – Valenzano (BA)
Virtual headquarters	Teams Code: aiith9c
Tutoring (time and day)	Monday and Wednesday 3:00-5:00 pm It is preferable to contact the professor via email or Teams for planning the activities.

Syllabus	
<b>Learning Objectives</b>	The subject, within the Degree Course, aims to increase knowledge, competencies and skills related to phenotypic evaluation of the different farm species and categories. Moreover, the subject aims to focus on the principles of the on-farm biosafety.
<b>Course prerequisites</b>	<i>The prerequisite of the "Principles of physiology and endocrinology of domestic animals" exam is required. The student must know the veterinary anatomy, physiology and endocrinology of the farm animals, particularly, digestive, reproductive, galactopoietic and body growth systems and functions.</i>
<b>Contents</b>	<p>Morphological evaluation (1 ECTS, 3 weeks, 10/04/ 2021-10/25/2021). Aims and history of the subject. Suitability and Aptitude. Morphological types. Estimation age by teeth eruption and wear. Animal body's regions in the ideal type, and relative and absolute defects.</p> <p>Functional evaluation (1 ECTS, 3 weeks, 25/10/2021-22/11/2021) Fertility. Fecundity. Prolificity. Adaptation and acclimatation. Resistance. Sexual and somatic precocity. Animal biomechanics. Posture and postural asymmetries.</p> <p>Test day controls (1 ECTS, 3 weeks, 11/22/2021-12/20/2021). ICAR, Law 52/2018, Test – day for milk, meat and wool production.</p> <p>On-farm hygiene (1 ECTS, 3 weeks, 01/10/2022-01/28/2021). Milking hygiene, stables hygiene, foot hygiene, manure management.</p> <p>Training: Class training for the age estimation by teeth. Training on handling of cattle, horse, sheep, goat External training in stud farm, slaughterhouse, shows</p>
<b>Books and bibliography</b>	- Dialma Balasini: Zoognostica Edagricole scolastiche, BO, 1992.

	- Tortorelli: Zoagnostica Degli Animali Domestici Edagricole BO; - Meregalli A.: Conoscenza Morfo-funzionale Degli Animali Domestici Ed.Liviana
<b>Additional materials</b>	The books are recommended for further study and integration. Given the compulsory attendance, the lecture notes/minutes and the material provided by the lecturer during the course will be of fundamental importance.

<b>Work schedule</b>			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
125	40	25	60
<b>ETCS</b>			
5	4	1	

<b>Teaching strategy</b>	The course will be carried out in an exclusively frontal, blended or remote mode, according to the guidelines approved by the University and the competent bodies. Training activities will be held both in the Campus and in Private and Public bodies.

<b>Expected learning outcomes</b>	
<b>Knowledge and understanding on:</b>	The student will be able to: <ul style="list-style-type: none"> <li>○ Know the techniques for the morphological and functional evaluation of a farm animal, according its production aptitude</li> <li>○ Know the fundamentals of on-farm biosafety</li> <li>○ Know the national and international bodies and laws related to phenotype collection</li> </ul>
<b>Applying knowledge and understanding on:</b>	The student will be able to show: <ul style="list-style-type: none"> <li>○ Competence in evaluating the productive merit of an animal based on its morphological and functional characteristics</li> <li>○ Competence in age estimation of a farm animal</li> <li>○ Recognize morphological and functional defects in an animal and estimate their impact on production efficiency</li> </ul>
<b>Soft skills</b>	<ul style="list-style-type: none"> <li>• <i>Making informed judgments and choices</i> <ul style="list-style-type: none"> <li>○ Ability to collect information directly from the farm, from manwork and from the data available at farm level to assess the management quality</li> <li>○ Ability to analyze test day controls reports</li> </ul> </li> <li>• <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Specific communication skills both with breeders and with specialized technical consultants</li> </ul> </li> <li>• <i>Capacities to continue learning</i> <ul style="list-style-type: none"> <li>○ Ability to find technical information through bibliographic research or through contacts with public and private bodies...</li> </ul> </li> </ul>

<b>Valutazione</b>	
<b>Assessment and feedback</b>	During the exam each student will estimate the age from an anatomical tool and not less than 3 questions will be asked. The questions will NOT be of a didactic type, but they will tend to mimic practical cases from which the student has to demonstrate that he recognizes the correlation of the phenotype with the

	<p>efficiency. The evaluation achieved in the exam on the present subject, together with those acquired in the "Genetic Improvement" subjects, will contribute to the determination of the final evaluation by the integrated exam "Animal Production I". The student can take the examination of the two subjects that make up the "integrated exam" in the same session, or a partial test of "Genetic Improvement", taking the exam of Livestock Technologies and Hygiene in a subsequent session</p>
Evaluation criteria	<ul style="list-style-type: none"> <li>• <i>Knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ To know the theoretical foundations relating to the evaluation of an animals through morphological and functional phenotypes</li> </ul> </li> <li>• <i>Applying knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Ability in evaluating the quality of an animal according to phenotyping</li> </ul> </li> <li>• <i>Autonomy of judgment</i> <ul style="list-style-type: none"> <li>○ Being able to formulate a personal judgment based on the phenotype data in relation to the estimated animal efficiency</li> </ul> </li> <li>• <i>Communicating knowledge and understanding</i> <ul style="list-style-type: none"> <li>○ Knowing how to use specific technical terminology appropriately</li> </ul> </li> <li>• <i>Capacities to continue learning</i> <ul style="list-style-type: none"> <li>○ Demonstrating knowledge of the available sources to find data and information useful in evaluating the animal phenotypes</li> </ul> </li> </ul>
Criteria for assessment and attribution of the final mark	<p>The final grade is awarded out of thirty. The exam is passed when the mark is greater or equal than to 18. The final mark of the integrated exam is the result of the arithmetic average of the marks obtained for each of the courses. In any case, the student must acquire a mark greater than or equal to 18/30 for each part of the exam relating to the two courses of Animal production I</p>
<b>Altro</b>	