General information		
Academic subject	Ethological bases of animal learning	
Degree course	Animal Science	
Academic Year	2021/2022	
European Credit Transfer and Accumulation System (ECTS)		6
Language	Italian	
Academic calendar (starting and ending date)	II Semester	
Attendance	Mandatory	

Professor/ Lecturer	
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Department and address	Veterinary Medicine Campus – Valenzano (BA)
Virtual headquarters	*Teams cod. 8l1fveg*
Tutoring (time and day)	Tuesday- Thursday 10.00-12.00 am Monday and Wednesday 3.00-5.00 pm At the Department or via Teams

Syllabus	
Learning Objectives	The course aims at transferring technical and in-depth knowledge of the behaviour of domestic species and about the intraspecific and human-animal communication signals. In addition, the course aims at creating useful knowledge for an autonomous and critical assessment of the specific ethological needs and the welfare of companion animals.
Course prerequisites	Students must have passed the exam of Principles of physiology and endocrinology of domestic animals. They should have acquired therefore the main principles in the field of anatomy and physiology of domestic animals, whose knowledge underlies the understanding of animal behaviour.
Contents	**Lectures** **Basic principles of animal ethology.** The study of animal behaviour: the descriptive and experimental ethology. Experimental ethology: methods of ethological study. Applied ethology: assessment of animal welfare, behavioural problems, training of working animals. Motivational systems and states in pets. Types of stimuli. **Animal behaviour.** Origins of behaviour and effect of domestication. Impulses, innate and learned behaviours. Genetics, heritability and influence of genes on behaviour. Behaviour development and critical periods. Knowledge and memory. Social behaviour and communication. The emotions of domestic animals. Sexual and reproductive behaviour. Biological rhythms. Feeding behaviour and sleep. Maternal behaviour. **Learning.** Neuroendocrine basis of learning and motivation. Learning classification. Attention and learning. Habituation and associative learning. Latent learning. Instrumental learning. Imprinting. Play. Insight. Memories and cognitive maps. Social learning. Imitation. **The human-animal relationship.** The use of domestic animals for human activities: animal assisted interventions, food production, sports, utilities, exhibitions. Animal welfare.

	Practical activities: The ethogram: the processing and evaluation of animal behaviour. Visual communication in domestic species. The study of animal emotions: Ethological parameters for evaluating the emotions of animals. Animal welfare: Methods for assessing animal welfare. Stress signals in domestic species. Experimental ethology: elaboration of an experimental protocol.
Books and bibliography	Per Jensen: The Ethology of Domestic Animals. McGraw-Hill – 2011
Additional materials	Lecture notes are recommended

Work schedule			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Out-of-class study hours/ Self-study hours
Hours			
150	*50*	*25 (Practical lessons will be repeated for limited group of students, on the bases of the total number of students)*	*75*
ECTS			
6	*5*	*1*	
Teaching strategy	Lessons will take place in the classroom, using the support of a projector, and will be presented as PowerPoint slideshows. The practical lessons will take place at the Labdog laboratory of the Section of Animal Physiology and Behaviour of the Department of Veterinary Medicine for a direct observation and evaluation of animal behaviour and welfare state by applying the different methodologies illustrated during lectures.		
Expected learning outcomes			
Knowledge and understanding on:	o Basic knowledge of the factors that determine the expression of animal behaviour o Basic knowledge related to the different species-specific behaviours and ethological needs of domestic species		
Applying knowledge and understanding on:	o Basic knowledge of animal behaviour assessment methodologies o Basic knowledge related to the parameters employed for the assessment of animal welfare		
Soft skills	• *Making informed judgments and choices* o At the end of the course, students must be able to evaluate the meaning of specific animal behaviours and to express their opinions about the causes and factors affecting their expression • *Communicating knowledge and understanding* o Students must acquire the correct scientific skills and technical language to provide specialist professional support. • *Capacities to continue learning* o Students must acquire the ability to improve their knowledge independently through further studies by reading specialized texts and scientific literature, as well as through courses, training and by the direct observation of animals and their behaviour.		

Assessment and feedback	
Methods of assessment	Oral exam. Student have to demonstrate technical and in-depth knowledge of several topics of the course program, using scientific terminology and showing critical judgements for the analysis of the behaviour of domestic animals.

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Evaluation criteria	• *Knowledge and understanding*
	    o Students are expected to organize the knowledge of the basic and fundamental concepts of teaching and to analyse the cause-effect relationships underlying animal behaviour and the ethological needs of the domestic species;
	• *Applying knowledge and understanding*
	    o Students are expected to demonstrate their knowledge about the methodologies and parameters employed for evaluating animal behaviour and welfare
	• *Autonomy of judgment*
	    o Students are expected to propose critical hypotheses on the causes and factors affecting the expression of companion animal behaviours
	• *Communicating knowledge and understanding*
	    o Students are expected to critically and independently discuss the issues addressed in the course program
	    o Students are expected to make connections between the different topics of the course program
	    o Students are expected to discuss the program topics with appropriate scientific and technical language
	• *Capacities to continue learning*
	    o Students are expected to show the ability to improve their knowledge independently through the reading of specialized texts and scientific literature.

Criteria for assessment and attribution of the final mark	The assessment of students' knowledge will be carried out through an oral interview. The final mark is expressed in thirtieths. The minimal final mark to pass the exam is 18/30. The highest marks will be attributed to the students who show optimal knowledge of the course program topics and the ability of using the correct scientific terminology during the interview.
Additional information	

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