

### Información del Plan Docente

Academic Year 2016/17

Academic center 105 - Facultad de Veterinaria

**Degree** 451 - Degree in Veterinary Science

**ECTS** 9.0 **Course** 1

**Period** Annual

Subject Type Compulsory

Module ---

- 1.Basic info
- 1.1.Recommendations to take this course
- 1.2. Activities and key dates for the course
- 2.Initiation
- 2.1.Learning outcomes that define the subject
- 2.2.Introduction
- 3.Context and competences
- 3.1.Goals
- 3.2. Context and meaning of the subject in the degree
- 3.3.Competences
- 3.4.Importance of learning outcomes
- 4.Evaluation
- 5. Activities and resources
- 5.1.General methodological presentation

### **Ethnology**

The learning process of this subject is based in all the next activities:

Theory. The program indicated for the subject will be developed in this activity, see point 5.3. This program will be



previously known by the students with respect to the annual program and with respect to a guide book. All this will be complemented with other resources as CDs, typed sheets and triptychs.

Practice. Breed diagnosis, these lessons will be related with breed differentiation in the most important domestic species. Many of them will be prepared by the own students, always helped by the teachers of the subject.

Practice in classroom. About reproductive and productive problems.

Practice. Personal work about any theme related with the Ethnology: any breed, variety, breed group, and also about morphological aspects, social opinions and/or utility.

Practice. Management of 4 different species. In this on-farm lectures, the main morphological aspects and identification systems for each species will also be showed.

Personal and continuous evaluation. This evaluation will be related with all the points related across the academic period. For that, small tests will be performed, they will be run in the own classroom, with evaluation at the moment and with a positive note for all the students with excellent results.

#### **Animal Welfare**

The learning group in this part of the course will use the following teaching resources:

- -Lectures in the classroom
- -Practices in the video room with digital video of our animal welfare experiments.
- -Practices with animals in the experimental farm (welfare assessment in laying hens)
- -Field studies in groups of four students. Data collection, data analysis, field report presentation.
- -Case studies (home work) and resolution in classroom with the instructor (mainly focussed in animal welfare legislation application to real cases).
- -Tutorials in lab/office (mainly related to the design and realization of the field works)



**Animal Welfare** 

-Seminar and debate with invited speaker (expert of some animal welfare hot topics).
-Course frame in the Digital Platform of the University <i>Moddle2</i> (all material and students communication will be conducted in this digital platform).
-Theory evaluation (multiple choice-test) at the end of the course (weight 60%).
-Evaluation of home works, case studies and field work reports (weight 40%).
-Tutorials by e-mail with the instructor.
-Availability at the beginning of the Course Manual " <i>Animal Welfare</i> " (114 pp.), prepared by the responsible teacher, including all the material explained in the course in class, actualized every year with the most recent material related to animal welfare topics in Europe. The manual contain all the recommended literature used in the elaboration of the manual. This manual will be mainly useful for those students with difficulties to attend the theory classes, complemented with tutorial by e-mail or in the lab/office.
-Availability at the beginning of the course of the PDF version of the Power Point presentations of the Instructors (in the digital platform).
-Availability of all case studies to be solved by the student in hard copy and pdf, before the case resolution in class with the instructors.
-At the end of the course and after exams, students will be able to evaluate the course and the instructors. This evaluation will be realized using the digital platform of the University (ATENEA).
5.2.Learning activities
Ethnology
The program offered to help the student to get the results includes the next programmed activities:
-Theory in classroom.
-Practical lesson in classroom.
-Practical lessons on-farm.
-Personal work.



All classes and activities will be programmed at the beginning of the course (Animal Welfare Course will start in early February -spring term-). Please, see groups and calendars in the web site of the Faculty of Veterinary Medicine, and check periodically for possible small changes during the course. <a href="http://wzar.unizar.es/servicios/calendario">http://wzar.unizar.es/servicios/calendario</a>

## 5.3.Program

### **ETHNOLOGY**

Activity	Hours Theory	Hours Practice	Group
			Size
Introduction			
Introduction to the subject and main definitions	1	-	-
Systematic of the breed classifications.	1	-	-
Physiology-related productive indexes (reproductive, farm and productive).	3	-	-
Productive and reproductive problems).		1	24
Work related with the Ethnology. Half an hour about methodology aspects and half and hour about individual attention.		1	75 and personal
Identification of farm animals (natural, artificial methods).	2	-	-

Identification of farm animals.		1	24
Management and re	egional peculiarities		
Small ruminants.		1	6
Horses.		1	6
Chicken.		1	6
Rabbits.		1	12
Breed differentiation	n.		
Horses. (Introduction, big breed, other breed, donkeys and hybrids).	2		
Bovines. (Introduction, world breeds grouped by aptitudes and Spanish breeds).	4		
Clues to bovine breed differentiation.		1	24
Ovine. (Introduction, world breeds grouped by ethnological types and Spanish breeds).	4		
Clues to ovine breed differentiation.		1	24
Goats. (Introduction world breeds grouped by aptitudes and	2		

			1
Spanish breeds).			
Clues to goat breed differentiation.		1	24
Pigs. (Introduction, hybrids, world breeds and Spanish breeds).	2		
Clues to pig breed differentiation.		1	24
Rabbits. (Introduction and breed classification).	1		
Clues to rabbit breed differentiation.		1	24
Poultry. (Introduction, main breeds inside the main species).	1		
Clues to poultry breed differentiation.		1	24
Pet birds. (Introduction and classification of the main species).	1		
Dogs. (Introduction and main aspect related with this species).	2		
Cats. (Introduction and main breeds).		4	48
Clues to cat breeds differentiation.	1		



		1	24
TOTAL (hours)	27	18	



## **Animal Welfare**

### Animal Welfare. Thematic program.

Theme

# I Animal welfare. Concepts and definition I.1 Animal Welfare in the context of the agro-ecosystem. I.2 Ethic and animal welfare I.3 The human-animal bond I.4 Violence and animal abuse



1.5	Animal welfare and the food market
1.6	Ethology and animal welfare
1.7	Problems derived from animal confinement
1.8	Relation between production and animal welfare
1.9	Genetic selection for productivity and its effect on animal welfare
II	Animal welfare: adaptive response (stress) and definition
II.1	Biological cost of the adaptation
II.3	Animal welfare definitions
III	Animal welfare assessment
III.1	Multi-index approach for animal welfare assessment
III.2	Levels of assessment
III.3	Animal welfare indicators: sensitivity to stress
III.4	The Welfare Quality approach in the UE
III.5	Animal welfare as a production aim
III.6	Animal production systems and animal welfare
IV	Common aspects to al systems: transport and handling
IV.1	Transport and animal welfare
IV.2	Transport as a housing system



IV.3	Rules for animal transportation in UE
IV.4	Critical points during transport: ventilation and environmental control
IV.5	The concepts of natural handling of livestock
IV.6	Strategies for livestock natural handling
IV.7	Vision type of domestic animal. Fearfulness in dichromatic animals.
IV.8	Stress factors during transport
V.	Fear reaction. Concepts.
V.1	Fear definition. Assessment of negative emotions. Related terms.
V.2	Fear assessment.
V.3	Determining factors of fear.
VI	Concepts of pain
VI.1	Pain definition
VI.2	Assessment of pain
VII	Concept of suffering
VII.1	Definition of suffering
VII.2	Sensory and cognitive capacities. Welfare implications
VII.3	Recognising and assessment animal suffering
VIII	Stress response and meat quality



VIII.1	Pre-slaughter handling and welfare consequences
VIII.2	Effect of stress on meat quality
VIII.3	Post-mortem metabolic changes and meat quality
VIII.4	Stress related meat defects
IX.1	The slaughter process
IX.2	Ante-mortem inspection
IX.3	Stunning and slaughter
IX.4	Stunning and slaughter control PNT. The welfare responsible figure.
	Animal production systems. Critical points associated to animal welfare.
X	The egg production system using battery cage. Laying hens.
XI	The poultry meat production system with broiler.
XII	The swine meat production system with high prolific sows.
XIII	The intensive cattle milk production system.
XIV	The cattle intensive meat production system. Feed lot.
XV	The livestock contribution to the greenhouse gas emissions (GGELS)
XVI	The intensive lamb meat production system using classification centres.
	Welfare issues on companion animals and



no domestic confined animals

XVII Dog and cat applied Ethology concepts

XVIII Aspects of animal welfare of companion

animals.

XIV Aspects of animal welfare on captive

no-domestic animals (Zoo-like systems)

## 5.4. Planning and scheduling

### **Ethnology**

The time table of the Ethnology will be adapted to the academic calendar. Each student will receive a total of 27 hours of theory and 18 hours of practical lessons. These last include: 4 hours of animal management, 1 hour of identification methods, 11 hours of breed differentiation (see program), 1 hour of solving productive and reproductive problems and 1 hour for preparing the index and methodology of the subject personal work..

These papers will be presented at the end of the Christmas time and will be evaluated during January. In any case some voluntary sessions of personal auto-evaluation will be performed.

For a more detailed calendar see:

http://wzar.unizar.es/servicios/calendario



### **Animal Welfare**

Summary table for the results and methodology used in the animal welfare part (spring term)

The academic calendar offer a total of 27 lecture hours (theory) and 18 "non-theoretical" lecture hours (practices in lab/hospital, practices in farm, field studies, case studies and seminars).

Results	Methodology	Credits	Evaluation
1 . To understand and explain the animal welfare issues in the EU, in the context of the agro-ecosystem and all animals under the care of humans.	Lectures and manual  Documents on digital platform  Field surveys  Reports and posters	0,25	Exam Field work Case studies
2 . To know and explain the ethical compromise of the Vet Professionals in relation to the animal welfare issues in EU. To know and understand the importance of the human animal bond and to detect cases of animal violence and abuse.	Lectures and manual  Survey, reports  Document available on digital platform	0,25	Exam Case studies
3 . To know the animal welfare definition according to the new EU concept based on the five freedoms.	Lectures and manual  Documents available in digital platform	0,75	Exam
4 . To know the physiological base	Lectures and manual	0,40	Exam



of the stress response in domestic and other captive animals.	Documents available in digital platform		
5 . To understand the relationship between animal welfare and product quality (including the ethical value of the product).	Lectures and manual  Case studies  Documents available in digital platform	0,20	Exam  Case studies  Home work
6 . To know the animal welfare assessment methods and the animal welfare indicators in function of its validity, feasibility and viability.	Lectures  Practices in farm  Case studies  Documents available in digital platform	0,20	Exam Practice farm Cases studies Home work
7 . To know the animal welfare legislation and to use this legislation in case studies based on case studies.	Case studies  Documents available in digital platform	0,50	Cases studies Home work
8 . To know the main intensive animal production systems (overview), with a critical perspective in relation to the animal welfare risks, proposing possible solutions in the context of the new food markets.	Lectures  Case studies  Documents available in digital platform	1,00	Exam Case studies Home work Practice at the farm
9 . To evaluate and distinguish the normal and abnormal	Lectures Practices in lab	0,50	Exam  Practice in hospital



behaviours in dog and cats.			
10. To recognize the critical points for animal welfare in companion animals.	Lectures	0,25	Exam
11 . To recognize the critical points for animal welfare in no-domestic captive animals (Zoo-type)	Lectures Seminar	0,20	Exam
Animal Welfare		4,5	Exam 60%
, united World		.,0	Others 40%

## 5.5.Bibliography and recomended resources

### **Ethnology**

Atlas of the world domestic farm animals. Editorial Servet, 2011. Author Carlos Sañudo Astiz. (A large basic bibliography it is also indicated in this book).

### **Animal Welfare**

Animal Welfare Manual(2016). Author: Gustavo A. María Levrino. Edited by University of Zaragoza. 114 pp. Legal Register: Z-46/2016.

http://psfunizar7.unizar.es/br13/eBuscar.php?tipo=a