

Academic Year/course: 2021/22

28402 - Ethnology & Animal Welfare

Syllabus Information

Academic Year: 2021/22

Subject: 28402 - Ethnology & Animal Welfare

Faculty / School: 105 - Facultad de Veterinaria

Degree: 451 - Degree in Veterinary Science

ECTS: 9.0

Year: 1

Semester: Annual

Subject Type: Compulsory

Module:

1. General information

1.1. Aims of the course

The student, once passed this subject, should be able to:

Ethnology

1. Identify an animal's breed (within the main breeds or breed groups) and its suitability or usefulness.
2. Make a value judgment on productive or morphostructural information of any important animal breed, in the main domestic species.
3. Understand the lexicon that defines the breeds and its variation of phenotypes, morphology and productivity.
4. Know the most important identification methods and make decisions about their usefulness in specific situations.
5. Present a subject work in an effective way and to be able to carry it out successfully.
6. Know the different basic aspects of the handling of animals.

Animal Welfare

1. To know and explain the animal welfare issues in Europe, integrating it in the context of an agro-ecosystem.
2. Be aware of the ethical commitment of the veterinarian in aspects related to animal welfare and its relationship with the human-animal link.
3. Understand the responsibility of the veterinarian in cases of animal violence in the context of the inter-specific family group and gender violence.
4. To know the definitions and concepts of animal welfare from an EU perspective.
5. To know the physiological bases of the adaptation syndrome (stress) of domestic animals, its biological cost and consequences for physical health and the emotional state.
6. To know the relationships between animal welfare and product quality, integrating animal welfare into a new quality concept within the agro-ecosystems.
7. To know the animal welfare evaluation systems, selecting accurate, valid and reliable animal welfare indicators.
8. To know the current legislation on animal welfare, its general foundations and its practical application in specific case studies.
9. To have a brief knowledge of the most intensive production systems, detecting their critical points for animal welfare and their alternative systems, proposing viable solutions for specific cases.
10. To know, in an introductory way, the normal behavior of the dog and the cat, as well as those behavioral alterations that can be indicators of a loss of welfare status in these species.
11. To know and differentiate normal behavior from altered behavior in dogs and cats.
12. To recognize the critical points that may affect the welfare of pets, analyzing possible viable solutions.

1.2. Context and importance of this course in the degree

Ethnology

It provides students with the practical necessary knowledge to approach the study of other subjects of the Degree in Veterinary, both basic and specialized.

It is a first year subject on the first semester, therefore it is going to receive students that most probably have not had previous contact with the Veterinary Sciences in general and Zootechnics in particular. For this reason, this course will provide students the keys to begin to configure their professional character as veterinarians.

Learning about animal breeds is a good introduction to Animal Production and professional reality and the subject plays an essential role in the training of the future Veterinarian.

Animal Welfare

The Universal Declaration on Animal Welfare (UDAW) (<http://www.udaw.org/about.htm>) has been adopted by the European Union (EU), the World Organisation for Animal Health (OIE), the Federation of Veterinarian of Europe (FVE) and the European Association of Establishment for Veterinary Education (EAEVE), and establishes that this matter is a priority in the training of Veterinarians, as they will be responsible for both defining and enforcing the legislation and standards required in relation to animal welfare. For more information, please visit the following links:

http://ec.europa.eu/food/animal/welfare/index_es.htm

<http://www.oie.int/doc/ged/D4079.PDF>

<http://www.eaeve.org/about-eaeve/mission-and-objectives.html>

http://www.fve.org/about_fve/workinggroups.php

This is a scientific discipline that refers to a physiological state of physical and mental well-being of the animal in a given environment, and can be objectively assessed through physiological, ethological, production and product quality indicators, as well as through the evaluation of housing conditions and handling of animals. The definition of Animal Welfare is based on the so-called Five Freedoms for Animal Welfare first formulated by the Farm Animal Welfare Council (FAWC) (<http://www.fawc.org.uk/freedoms.htm>). We define Animal Welfare as *a dynamic state in which animals adapt effectively in a given environment, overcoming challenges with a minimum biological cost, maintained in a state of complete physical and mental health, in harmony with its environment*. A complete list of definitions of Animal Welfare have been enunciated in our European Project LAYWEL whose website can be consulted at: <http://www.laywel.eu/>

Animal Welfare is, in addition to an ethical aspect of production, an added value of the product that should be valued and certified so that consumers assume a broader concept of quality that includes it in addition to the intrinsic quality of the products. Therefore, the new production systems should include the analysis and optimization of the animal welfare as a main component of the system, with a strong influence on the efficiency of the transformation processes.

The Veterinarians should know and understand the characteristics of the human animal-bond between our clients and their pets, in order to be able to advise properly and to assess the consequences of our recommendations may have on the welfare of the animal and its family.

Although the human-animal relationship is usually good, sometimes people can treat animals in a negligent, violent and even cruel manner. When these situations occur, the ethical and professional principles of the Veterinary Medicine indicate that veterinarians have a responsibility not only to the animals involved, but also to the Society as a whole. The majority of veterinarians recognize their important role in the detection and prevention of animal abuse. Veterinarians should be able to make a clinical diagnosis of animals suspected of mistreatment, cruelty, abuse, emaciation or signs of fighting. However, there is a general coincidence that there are no protocols for appropriate action for these cases that often transcend the animal abuse and sometimes happen to interpersonal and gender-based violence. There are numerous obstacles, in the first place, the little or no training received, as a result of the lack of attention paid to the Forensic Veterinary (www.ivfesa.org); secondly, the scarce legal guarantees that protect the Veterinarian when must report such suspicious cases, especially those in which family violence is suspected; and, thirdly, the absence of clear guidelines and protocols to follow in these cases of animal and/or family violence or abuse.

It is therefore very necessary to include in the Animal Welfare *curriculum* as a competency, and as a subject. Without any kind of attachments, since it is a clear, concise and universally accepted term in all statements about Animal Welfare. We are thus complying with the recommendations of the EU, OIE, FVE and EAEVE, in line with other modern and advanced programmes in Europe.

Contribution to Sustainable Development Goals (SDG)

In the context of UNIZAR's commitment to the Sustainable Development Goals (SDGs) included in the United Nations 2030 Agenda, this part of the Subject provides the following SDGs:

Goal 2. Zero hunger. This subject presents Agroecosystems under the new concept of Animal Welfare and sustainability. A critical vision of the systems to adapt them to the new demands of the European market.

Goal 3. Health and Well-being. In the context of the One Welfare Project (see: <https://www.youtube.com/watch?v=D0TfYUMBJ3E>) this part of the course aims to connect three fundamental aspects: Animal Welfare, Human Welfare and the Physical and Social Environment .

Goal 5. Gender equality. In the context of the interspecific family where there are non-human animal members, when dealing with the issue of violence and animal abuse, the problem of the new concept of victim and the factor of violence towards the companion animal is presented as an element that connects with domestic violence. The responsibility of the veterinary profession in situations of animal violence and possible domestic violence is addressed.

Goal 6. Clean water and sanitation. It is intended to show the impact that animal production has at the current rate on the availability of fresh water on the planet and to raise awareness that production systems must be optimized to make them more sustainable.

Goal 12. Responsible consumption and production. A new concept of product quality is presented that includes the ethical quality that is more respectful of animal welfare and the environment. There is talk of food sovereignty and of making the recommendations of human health in the diet coincide with the subsidy policies in the EU.

Goal 15. Life and terrestrial ecosystems. The challenge of agro-ecosystems is presented to adapt to the new demands in relation to animal welfare and the environment. Systems must be adapted to make them more sustainable while respecting the ecosystems where they are implanted.

Goal 13. Climate action. The impact that animal production systems have on climate change as a consequence of their emissions and the use of fresh water is presented. analyzing reality and presenting possible future strategies to make animal

production compatible with respect for the environment. This objective is connected with that of responsible consumption and that of clean water and sanitation.

1.3. Recommendations to take this course

The basic requirements are those corresponding to the initiation of the Veterinary Degree. Basic knowledge of Biology, Anatomy, Mathematics, Biochemistry, Ethics and English are important to facilitate understanding. It also requires the ability to work in groups and solve cases and problems that require the search for information. Knowledge of computers and Internet use are also highly recommended.

To carry out the practical activities, you must follow some safety recommendations that must be taken into account. Students have all the information available in the following links, as well as in the ADD courses of each of the subjects:

<https://veterinaria.unizar.es/estudiantes/formacion-prevencion-riesgos-y-seguridad#normas>

<https://veterinaria.unizar.es/prevencion/protocolosespecificosveterinaria>

<http://patologiaanimal.unizar.es/medidas-de-safety>

2. Learning goals

2.1. Competences

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

Ethnology

1. Identify the breed, its aptitude and the productive implications of the different domestic species.
2. Use in an appropriate way a veterinarian lexicon of habitual use.
3. Understand the complexity of animal identification and its possibilities.
4. Handling animals.

Animal Welfare

1. To interpret and explain the social problem of animal welfare in Europe, integrating it in the context of the agro-ecosystem.
2. To have an ethical perspective in relation to animal welfare issues and its relation to the human-animal bond.
3. To know the responsibility of the veterinarian in cases of animal violence in the context of the inter-specific family and gender violence.
4. To define animal welfare from a EU perspective, based on a holistic concept of animal welfare in relation to the five freedoms.
5. To know the physiological bases of the animal adaptation syndrome (stress), its biological cost and consequences for physical and mental health.
6. To know the relationship between animal welfare to product quality, integrating welfare into a new quality concept within the agro-ecosystem.
7. To know the concept of animal welfare assessment systems, being able to select valid, reliable and viable animal welfare indicators. Understanding current animal welfare legislation, its general rationale and its practical application in specific cases.
8. Understand the current legislation on animal welfare, its general foundations and its practical application in specific cases
9. To know briefly the most intensive production systems, detecting their critical risk points for animal welfare and proposing alternatives within the framework of a more demanding global market, in relation to the resolution of specific cases of risk to animal welfare.
10. To know and differentiate normal behavior from altered behavior in dogs and cats.
11. To recognize the critical points that may compromise animal welfare of pets and to suggest possible viable solutions.
12. To recognize the critical points on which to act to improve the welfare of non-domestic animals in captivity.

2.2. Learning goals

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

Ethnology

- Identify the breed of an animal (within the main breeds or racial groups) and its suitability or utility.
- Make a value judgment on productive or morphostructural information of any kind.
- Make a value judgment on productive or morphostructural information of any important animal breed, in any domestic species.

- Understand the lexicon that defines the breeds and its variation of phenotypes, morphology and productivity.
- Understand the need for animal identification and the usefulness of available methods.
- Know different basic aspects of animal management.

Animal Welfare

1. Assesses and critically evaluates the social problem of animal welfare in the EU in the context of an agro-ecosystem and other animals under human responsibility.
2. Explain and argues about the Veterinarian's ethical commitment to animal welfare issues in the context of European legislation.
3. Understand the human-animal link and the role of the veterinarian in the recognition and prevention of cases of animal and family violence.
4. Define animal welfare and describing the basic concepts related to animal welfare from a modern animal welfare perspective based on the five freedoms.
5. Describe the physiological basis of the adaptation syndrome (stress) of domestic animals, its biological cost and physical and mental health consequences and the emotional state.
6. Relate animal welfare to product quality by integrating welfare into a new concept of quality within of the production system.
7. Describe, in a generic way, the systems of evaluation of the animal welfare, being able to select valid, reliable and viable indicators of animal welfare.
8. Know the fundamentals of current animal welfare legislation and how to apply it in specific case studies.
9. Describe, in a generic way, the most intensive and risky production systems for animal welfare, indicating their critical points and proposing viable production alternatives or partial modifications to the existing ones, aimed at improving animal welfare and efficiency.
10. Assess and differentiate a normal behavior from an altered one in dogs and cats
11. Know the critical points on which to act to improve the welfare of companion animals in the context of the interspecific family group.
12. Recognize critical points for the welfare of non-domestic animals in captivity

2.3. Importance of learning goals

Ethnology

In addition to the learning and acquisition of competence previously indicated, the student will be able to have a better understanding and make the most of other subjects, both in the area of Clinical Sciences, in which he/she will learn something fundamental about who the patient is, as in the zotechnical subjects of Nutrition and Food, Genetics and especially in ALL the integration of fourth year.

Animal Welfare

The importance of the learning results obtained in the subject are deduced from the points and observations described in the section on context and meaning of the subject in the degree.

3. Assessment (1st and 2nd call)

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

Evaluation activities

Ethnology

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

In order to handle animals, their aptitude and disposition will be valued in the respective practical classes, the professor will value the ability demonstrated by the student to acquire the different management skills taught during the course. practical demonstration.

In order to recognize the breed, its aptitude and the productive implications of the different domestic species, we will do the following corresponding theoretical (multiple-choice and developmental questions; 4 wrong answers equal 1 right answer) and practical (breed differentiation by means of the audiovisuals). Each one of these aspects will be valued respectively with 6 and 2 points out of 10. In the theoretical part the student must obtain a grade equivalent to 5, in practice the equivalent to 6, in both parts the serious errors or racial identification will be penalized. The exams will be carried out in writing or through the Moodle platform of the University of Zaragoza.

The appropriate use of an everyday veterinarian and farmer lexicon and knowledge of the various identification methods, will be assessed by means of a theoretical examination with multiple-choice questions. Its valuation is included within the 4 points assigned to the theory, already indicated in the previous paragraph.

The remaining 3 points (3 out of 10) are acquired by the evaluation of an individual practical work (1 point), and by the results of the continuous evaluation (2 points). This continuous evaluation includes the evaluation of the practices, the results of

evaluation exercises carried out in class and voluntary activities previously known by the teacher and that, in no case, will imply a decompensation in the student's POD. For repeating students, the grades obtained in this section will be kept automatically, unless expressly waived.

Animal Welfare

The student must demonstrate that he has achieved the learning results provided in the activities and evaluation detailed in Table 1. The evaluation will be as detailed below:

Global Exam (combined theoretical exam -60% - and homework -40% -) Theoretical exam (60%): consisting of a multiple-choice exam, with 4 options per question (only one of them valid) and applying a random correction coefficient of 25%. The maximum mark for this exam is 6 points and it is passed with a mark equal to or greater than 3 (50%). In the event of a state of alarm, this exam will be in task mode as a case study to be solved with available bibliography in a given time. When this exam is passed, those works carried out throughout the course are added, whose weight in this case is 40%.

Evaluation of works (40%):

Six case studies. Own study based on real cases of animal welfare on topics presented in class, the student will receive the case two weeks before to solve it and a classroom session will be held with the Professor where the work will be delivered. (20 points)

Field work on a current topic in Animal Welfare based in the City of Zaragoza. Animal welfare surveys in groups of 3-4 people. Carry out surveys, data preparation with a computer application and preparation of a corresponding report. With all the course data, a poster will be made that will be publicly displayed at the Faculty. Work done throughout the course in groups of 3-4 students (20 points)

Ethological observation field work. Application of the methods of recording and analysis of behavior learned in the classroom with video, on a kind of group choice. Study design, methodology, record of observed behavior data, analysis and preparation of memory. Work done throughout the course with the help of the responsible teacher in groups of 3-4 students (20 points)

Total grade for jobs: 40%. They will only be added to the final animal welfare grade when 50% of the theory exam grade (60%) is obtained.

Dog training practice PW5: Veterinary Hospital. On-site evaluation at the end of the internship and compulsory attendance

Practice in Classroom PW3: recording and analysis of animal behavior (attendance and practice notebook).

Practice in experimental PW4 layer farm (assistance and practice guide with written questions at the end of the practice revised at that time)

Valuation criteria and requirement levels

Finally, in order to pass the theoretical exam, it is required to obtain 50% of the possible points, 60% in the practical one, as previously specified.

The final grade of this subject is obtained by averaging the grade obtained in Ethnology and Animal Welfare. This final grade will be obtained once the two parts of the subject have been passed.

The subject is passed with a grade equal to or higher than 5 out of 10. The qualitative grade will respond to the following criteria established in the exam regulations of the University of Zaragoza.

Note: If a student passes only one of the parts (Ethnology or Animal Welfare), the grade will be kept in the Unit's database until the student passes the other part of the course.

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.

Tests for non-face-to-face students or those who appear in other calls different from the first

There will be a theoretical and practical exam that will cover everything taught in the subject (theory and practice), Ethnology and Animal Welfare.

The assessment criteria and the level of demand for non-contact students will be: the theoretical part (60%) and the practical part (40%). The exam will be adapted to the syllabus taught in the respective academic year.

For students who appear in other calls other than the first, the evaluation, assessment criteria and level of demand will be the same as in the first call.

4. Methodology, learning tasks, syllabus and resources

4.1. Methodological overview

Presentation of the global methodology

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.

Practical class of breed diagnosis, participative and prepared by the students in all species, always with the corresponding advice from the teachers of the subject. These practices may be carried out through the use of the student's mobile phone or personal computer, through gamification platforms.

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

Visit to animal fair.

Personal and continuous evaluation. This evaluation will be related with all the points related across the academic period. For example, of 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:

- Theoretical master classes in the classroom.
- Theoretical master classes in recorded Power Point available in the ADD (conditional on the availability of Unizar)
- Practical classroom classes.
- Practical classes canine education in units of the Veterinary Hospital
- Practical class with animals. Assessment of Animal Welfare in the SEA Laying House
- Field studies with written memory presentation in PDF.
- Study cases with individual work and resolution in Moodle in the "Task" mode with deadline for delivery and assistance from the Professor online through the platform determined by the University and by email.
- Personal tutorials.
- Course in Teaching Digital (ADD). Moddle2 platform.
- Theoretical evaluation (multiple choice exam).
- Evaluation of tasks
- Personal tutoring by email.
- Availability at the beginning of the course (144 pages) of an Animal Welfare Manual, prepared by the Responsible Professor with all the material to be taught in theoretical classes, updated each course using the most recent bibliographic material that is detailed in the bibliography of the subject .
- Availability of PDF of all class Power Point presentations in the ADD.
- Availability of case studies in digital format in ADD.
- Telematic evaluation of the Subject and the Teaching Staff (ATENEA Platform).

4.2. Learning tasks

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.

Animal Welfare

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

4.3. Syllabus

PROGRAMA y PROGRAMACION (ETNOLOGIA)	Horas teoría	Horas práctica	gru
TEMAS INTRODUCTORIOS			
Introducción asignatura y definiciones.	1	-	-
Sistemática de la clasificación racial. Baron.	1	-	-
Índices fisiozootécnicos (reproductivos, explotación y productivos).	4	-	-
Casos productivos (problemas).		1	
Trabajo racial (trabajo sobre una raza). Media hora explicación al curso de la metodología del trabajo (2 grupos) y media hora de atención individual.		1	75
Identificación en las especies ganaderas (naturales tecnificados y artificiales).	2	-	-
Identificación en las especies ganaderas		2	
MANEJO Y PECULIARIDADES REGIONALES			
Pequeños rumiantes.		1	6
Équidos.		1	6
Aves.		1	6
VISITA A FERIA DE GANADO			
Multi-sectorial, en lo posible combinada con explotación ganadera y parque de animales		1	2 g
DIFERENCIACION RACIAL.			
Especie equina. (Introducción, grandes razas, otras razas, asnos e híbridos).	2		
Especie bovina. (Introducción a la especie, razas mundiales por aptitudes, razas españolas).	4		
Claves diferenciación racial en bovinos.		1	
Especie ovina. (Introducción, razas mundiales por tipos raciales, razas españolas).	4		
Claves diferenciación racial en ovinos.		1	
Especie caprina. (Introducción a la especie, razas mundiales por aptitudes, razas españolas).	2		
Claves diferenciación racial en caprinos		1	
Especie porcina. (Introducción, hibridación, razas mundiales, razas españolas).	2		
Claves diferenciación racial en porcinos.		1	
Conejos. (Introducción, clasificación racial).	1		
Claves diferenciación racial en conejos.		1	
Aves de granja. (Introducción, clasificación racial dentro de las principales especies).	1		

Claves diferenciación racial en las aves de granja.		1	
Aves de jaula. (Introducción y clasificación de las principales especies).	1		
Especie canina. (Introducción: Aspectos básicos).	2		
Claves diferenciación de grupos raciales en perros.		2	
Especie felina (Introducción y razas principales).	1		
Claves diferenciación racial gatos.		1	
TOTAL (horas)	28	17	

Programación temática bienestar animal (contenido en el ?Manual de Bienestar Animal?, 14.

#	Tema
I	Bienestar Animal (BA): conceptos y valoración
I.1	Bienestar animal en el contexto del agro-ecosistema
I.2	Ética y Bienestar Animal. Líneas de pensamiento.
I.3	El vínculo humano-animal. Importancia el anamnesis y consejo Veterinario.
I.4	Violencia y maltrato animal. Papel del Veterinario.
I.5	Bienestar Animal y mercado
I.6	Etología y Bienestar Animal
I.7	Problemas derivados de la estabulación
I.8	Relación entre producción y bienestar animal
I.9	Selección genética por productividad y bienestar animal
II	Bienestar Animal: respuesta adaptativa y definición
II.1	Coste biológico de la adaptación
II.3	Definiciones de Bienestar Animal
III	Valoración del Bienestar Animal
III.1	Aproximación de múltiples criterios
III.2	Niveles de actuación
III.3	Grupos de indicadores de bienestar animal: Umbrales de sensibilidad al estrés
III.4	El sistema <i>Welfare Quality</i> de la UE
III.5	El Bienestar Animal como objetivo de producción
III.6	Categorización de los Sistemas de Producción
IV	Aspectos Comunes a todos los sistemas. Transporte
IV.1	Transporte y Bienestar Animal
IV.2	El transporte como alojamiento

IV.3	Reglamentación del transporte de animales en la UE
IV.4	Puntos críticos en el transporte de animales. La ventilación
IV.5	El manejo natural del ganado
IV.6	Estrategias par aun manejo natural del ganado
IV.7	Modo de visión y manejo del ganado
IV.8	Factores que afectan el estrés por transporte
V.	Conceptos. Reacción de miedo
V.1	Definición de miedo y terminología
V.2	Medición del miedo
V.3	Factores determinantes del miedo
VI	Concepto de dolor
VI.1	Definición de dolor
VI.2	Medición de la conducta dolorosa
VII	Conceptos. Sufrimiento
VII.1	Definición de sufrimiento
VII.2	Capacidades sensoriales y cognitivas. Implicaciones
VII.3	Reconocimiento y valoración del sufrimiento
VIII.	Estrés y calidad de la carne
VIII.1	Consecuencias del manejo pre-sacrificio
VIII.2	Efecto del estrés sobre la calidad de la carne
VIII.3	Cambios metabólicos post-mortem
VIII.4	Defectos de la carne por estrés
IX	Sacrificio.
IX.1	El proceso de sacrificio
IX.2	Inspección ante-mortem
IX.3	Aturdimiento y sacrificio
IX.4	Sistemas de control del aturdimiento y el sacrificio.
	El encargado de bienestar animal.
X.	Descripción de algunos sistemas intensivos de producción: puntos críticos para el BA*
X. 1	El sistema de ponedoras en batería.
X.2	El sistema intensivo de producción de carne de pollo (broiler)
X.3	El sistema de producción de carne de porcino

X.4	El sistema intensivo de producción de vacuno de leche
X. 5	El sistema intensivo de producción de vacuno de carne (feed lot)
X. 6	El sistema intensivo de producción de carne de ovino (especial referencia a Aragón)
XI.	La ganadería y la emisión de gases de efecto invernadero (GGELS). Relación con el BA
XII.	Etología aplicada canina y felina
	Aspectos de bienestar animal en animales de compañía
	Aspectos de bienestar animal en animales no domésticos cautivos (Zoo y similares)
	*Se describen someramente los sistemas con especial énfasis en los aspectos más críticos para el BA. Por tiempo hemos tenido que priorizar los sistemas más intensivos, y en especial aquellos que han sido motivo de legislaciones específicas. Según la disponibilidad se procurará abordar también sistemas como el de acuicultura o producción cunicola, que en el futuro cercano serán motivo de legislaciones específicas de BA.

4.4. Course planning and calendar

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 personal work.

This personal work will be presented just before 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

	Clase interactiva y Tareas en Moodle		Examen
1. Ser capaces de interpretar y explicar la problemática social del bienestar animal en Europa integrada en un agro-ecosistema	Encuestas minoristas	0,25	Trabajo
	Encuestas consumidores		Casos
	Elaboración y exposición pública de póster		
2. Compromiso ético de la Profesión Veterinaria en los aspectos relacionados con el bienestar animal. Vínculo y Violencia animal	Clases interactivas y Tareas en Moodle	0,25	Examen
	Material disponible previamente Manual de Bienestar Animal		Casos
3. Conocer las definiciones y conceptos de bienestar animal desde una perspectiva Europea	Clases teóricas y Tareas en Moodle	0,75	Examen
	Material disponible previamente. Manual de Bienestar Animal		

4. Conocer las bases fisiológicas de los procesos adaptativos ambientales de los animales domésticos	Clases teóricas	0,4	Examen
	Material disponible previamente. Manual de Bienestar Animal		
5. Saber relacionar el bienestar animal con la calidad del producto integrando el bienestar en un nuevo concepto de calidad	Clases teóricas y Manual	0,2	Examen
	Casos de estudio		Casos
	Material disponible previamente. Manual de Bienestar Animal		Tarea
6. Conocer los sistemas de evaluación del bienestar animal, siendo capaces de seleccionar criterios de bienestar animal válidos, fiables y viables	Clases teóricas	0,2	Examen
			Examen Tarea
	Casos de estudio y Tareas en Moodle		Tarea

			Trabajo
7. Conocer la legislación vigente en bienestar animal, sus fundamentos generales y su aplicación práctica en casos concretos (casos de estudio)	Casos de estudio	0,5	Casos
	Material disponible previamente, Manual de Bienestar Animal		
8. Conocer de manera genérica los sistemas de producción, detectando sus aspectos de riesgo para el bienestar animal y sus alternativas en el marco de un mercado global más exigente	Clases teóricas	1	Examen
	Tareas con protocolo UE Welfare Quality Ponedoras		Casos
	Casos de estudio y		Tarea
	Material disponible previamente. Manual de Bienestar Animal		
9. Valora y diferencia una conducta normal de una conducta alterada en el perro y en el gato.	Clases teóricas y prácticas	0,5	Examen labora

10. Indica los puntos críticos sobre los que actuar para mejorar el bienestar de los animales de compañía.	Clases teóricas Manual de Bienestar Animal	0,25	Exame
10. Indica los puntos críticos sobre los que actuar para mejorar el BA de animales no domésticos en cautividad	Clases teóricas y seminario	0,2	Exame
Total Bienestar Animal		4,5	Exame Otros

On the website of the Faculty of Veterinary Medicine (<http://veterinaria.unizar.es/gradovet>) you can find out in detail the calendar of the different activities of the subject.

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4.5. Bibliography and recommended resources

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?id=4836>