

WELFARE AND ANIMAL PROTECTION

STRUCTURE

Study program	<i>Veterinary Medicine – English Program</i>
Year of study	3 rd : 2025-2026
Semester	6 th
Type of discipline	mandatory specialty-specific subject
Total number of hours / week	Course - 2 hours; PW - 2 hours
Total number of hours according to curriculum	Course - 28 hours; PW - 28 hours
ECTS	4 credit points

DISCIPLINE OBJECTIVES

Acquisition of knowledge and enhancing skills related to welfare standards' auditing, animal protection, identification and practicing animal welfare assessment at group level, application of ethical and scientific principles on field and in laboratory/biomedical research activities. At the end of the course, the student: summarizes the fundamental notions of animal welfare and the main international and national institutions/organization in the field, the specific legislation; the multiple relationships between animal welfare and all the related concepts; identifies welfare issues and objective welfare indicators and conducts welfare audits for farm animal, companion animals, animals used for scientific purpose, animals for sports, leisure and exhibition, wildlife animals.

DISCIPLINE CONTENT

COURSE	No. of hours
Chapter I - Introduction (aim of the study; definition of the animal welfare and protection science; importance for human society, history of human-animals' relations; Universal Declaration of Animal Rights; general considerations on animal protection, the related legal system, international and national bodies in the field of animal welfare and conservation, veterinary services and animal welfare; Veterinarian, profit and animal welfare)	4
Chapter II - Animal welfare (etymology, scientific theories for defining animal welfare; relationships between welfare, coping, acclimatisation and adaptation; between welfare, stress and discomfort; between welfare, needs and desires; welfare and behaviour; welfare and health; welfare and pain; implications and relationships animal welfare - international trade; detailed notions on animal welfare assessment: general considerations, criteria and auditing principles, assessment of welfare at farm level: integrative numerical systems, protocols focusing on animal-based indicators, behaviour and resources, management systems/practices, housing conditions by animal species, including microclimate; welfare standards, operations and issues during the shipping of animals, welfare of animals during slaughtering/killing; assessment of animal welfare at laboratory level)	12
Chapter III - Protection of farm animals (general information on the welfare of farm animals; protection of cattle: calf productions and beef lots, dairy cows, young cattle for fattening; pigs: breeding sows, growing and finishing pigs; poultry: laying hens, chicken broilers, palmipedes, game birds, ostriches; farmed deer; sheep and goats; rabbits; farmed fish; farmed fur animals)	9
Chapter IV - Protection of wild animals (wild animals' trading; protection of wildlife and natural habitats in Europe; whales' commercial hunting; dolphins and porpoises; seals and walruses; marine turtles; fur animals trapped etc.)	0.25
Chapter V - Protection of pets (general information on the welfare of these species; registration and control of dogs; feral cats; sale of favourite animals and animal rewarding etc.)	1.5
Chapter VI - Protection of animals used for scientific purpose (problems concerning the genetic manipulation of animals in research activities; the use of wild animals in experiments and for the testing of cosmetics; dangerous chemicals testing on animals; welfare of genetically modified animals)	1
Chapter VII - Protection of animals used for sport, entertainment and for exhibitions (animal welfare in zoological parks and nature reserves; use of animals in circuses; performance animals in general entertainment; horse races, greyhound races; angling; field sports; traditional entertainment and folkloric events involving cruelty to animals)	0.25

PRACTICAL WORKS PW	No. of hours
Chapter I - Animal housing conditions as objective welfare indicators (establishing the animal house surface and volume; assessing the light quality in the barns; house ventilation - animal house ventilation requirements, types of ventilation systems, air exchange in natural and mechanical ventilation systems, ventilation calculations; house heat balance; welfare assessment based on housing conditions - case study; determination of the microclimate of animal houses, housing conditions' global assessment sheets: <i>engineering-based parameters</i> with impact on animal welfare) / Practical topics evaluation 1	14
Chapter II - Harness and body hygiene, associated welfare problems (harnesses in horses, cattle, gears used for dogs, welfare issues associated with inappropriate harnesses or inadequate use of draft/working animals; body hygiene and problems generated by poor body hygiene) / Filling in welfare assessment forms	4
Chapter III – Evaluation of animal welfare at farm level (assessment based on behavioral indicators, on management systems and practices; evaluation by using integrative numerical systems e.g., ANI 35L, ANI 200; welfare audits based on the H.A.C.C.P. system etc.)	2
Chapter IV - Animal welfare during transportation (general considerations, transportation means; animal transportation classification; morpho-physiological and behavioral features of different animal species in relation with transportation; conditions of loading/resting/unloading and during the journey; animal welfare assessment during transportation) / Filling in welfare assessment forms for animals kept for scientific purpose / welfare assessment forms for captive animals in zoological parks / identifying incompliances during animal transportation	4
Chapter V – Welfare of animals at the time of slaughter (general considerations, stunning and slaughtering procedures; assessment of animal welfare in slaughtering units: NAMI assessment forms)	4

REFERENCES

1. Furnaris, F. - Lectures and practical topics' handouts 2025-2026 (academic.usamv.ro)
2. Furnaris, C.F., Constantin, N.T. - Perspective Chapter: Exploring Multifaceted Approaches to Enhance Dairy Cow Welfare, chapter in From Farm to Zoo, IntechOpen Publishing House, 2024, ISBN 978-0-85014-129-0, DOI 10.5772/intechopen.115031
3. Webster, J – Management and welfare of farm animals: The UFAW Farm Handbook 5th Ed., Wiley-Blackwell, 2011, ISBN 978-1-4051-8174-7
4. *** worldanimalprotection.org.au/education/concepts-in-animal-welfare (training resources)

EVALUATION

Type of activity	Evaluation criteria	Method of evaluation	Percentage of final grade %
Courses	Acquisition of theoretical notions on animal welfare and protection, the relationship between welfare and related concepts, legislation in this field, welfare issues and welfare assessment methods for farm animals, pets, captive animals, animals used for scientific purposes and wild animals, welfare standards and welfare level assessment during transport and in slaughterhouses Course participation Presenting a scientific review	Written exam (40 multiple-choice questions with one correct answer among 5 possible options), each correct answer being scored with 0.22 points	70%
PW	Passing the laboratory test (minimum grade 5) and filling in the auditing forms for the welfare of horses, animals for scientific purpose, animals in zoos etc. are mandatory conditions for participation in the theoretical final exam	Practical topics' evaluation: solving a problem comprising of 4 calculations' points, filling-in welfare auditing forms	30%
Other activities	The minimum grade for passing the exam is 5 and it aims: acquiring knowledge on and application of welfare standards for different species of farm animals, companion animals, animals used for scientific purpose, practicing the welfare assessment protocols; knowledge of the notions related to animal protection, familiarization with the legislation and organizations/bodies in the field; identifying and interpreting the notions of bioethics/deontology, understanding the motivations of animal welfare; certification of the acquisition of competences by filling-in and signing the student's logbook by the student and the teacher.		

Course teaching staff: Assoc. Prof. Furnaris Ciprian Florin, D.V.M. PhD

Practical work teaching staff (PW): Assoc. Prof. Furnaris Ciprian Florin, D.V.M. PhD