

This teaching module provides the following elements, which are useful for achieving **EAEVE Day One Competences**

- 1.1 Act in a way that shows understanding of the ethical and legal framework within which veterinarians should work, including professional-, animal welfare-, client-, public health-, societal- and environmental-related aspects.**
- 1.3 Demonstrate a basic knowledge of the organisation, management and legislation related to veterinary practice. Understand the economic and emotional context in which the veterinarian operates.**
- 1.4 Promote, monitor and contribute to maintaining health and safety of oneself, patients, clients, colleagues and the environment in the veterinary setting; demonstrate knowledge about the principles of quality assurance; apply principles of risk management in practice.**
- 1.5 Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned and in full respect of confidentiality and privacy.**  
The student is able to present and discuss clinical cases within the working team  
The student is able to discuss with the medical team the working plan of an hospitalized patient
- 1.6 Implement principles of effective interpersonal interaction, including communication, leadership, management, team working, mutual respect and other soft skills.**
- 1.7 Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to the relevant audiences.**
- 1.8 Work effectively as a member of a multidisciplinary team in the delivery of services and recognise the contribution of all team members.**
- 1.11 Demonstrate ability to critically analyse evidence, cope with incomplete information, deal with contingencies, and adapt knowledge and skills to varied scenarios and contexts.**
- 1.13 Demonstrate the ability to recognise personal and professional limits, and know how to seek professional advice, assistance and support when necessary.**
- 1.14 Demonstrate a commitment to lifelong learning and to professional development. This includes recording and reflecting on professional experience and taking measures to improve performance and competence.**
- 1.15 Engage in self-audit and peer-group review processes on a regular basis in order to improve performance.**
- 1.16 Obtain an accurate and relevant history of the individual animal or animal group, and its/their husbandry and environment.**  
The student is able to ask proper questions to the dog/cat owner aimed to collect relevant information about the patient history, including identification of the main complaint, its onset and progression, the effect of previous treatment, and information on diet, deworming, vaccination and reproductive status (if applicable)  
The student is able to write in a sequential and proper way the history of the patient in the clinical record using the appropriate Veterinary Medical terminology  
The student is confident in using the Veterinary Hospital/Clinic management/recording software/system  
The student is able to arrange a Q&A talk to obtain clinically relevant information and to elaborate an history of a horse  
The student is confident/acquainted with the National and Regional system for livestock identification (Anagrafe zootecnica or herdbook) with special reference to cattle

The student is able to write in a sequential and proper way the history of the patient in the clinical record using the appropriate Veterinary Medical terminology

**1.17 Handle and restrain animal patients safely and with respect of the animal and instruct others in helping the veterinarian to perform these techniques.**

The student is able to approach safely a dog/cat

The student is able to restrain a patient, including placing a muzzle in a safe way for him/her, the owner and the animal

The student is able to handle hospitalized dogs/cats in a safe way

The student is able to teach other students to handle and hold dogs/cats with confidence and safety

The student is able to safely get close, halter, and manually restrain a horse and is able to restraint it using the basic tools used for that aim

The student shows confidence and handles hospitalized horses in a safe manner

The student safely approaches to a cow/calf

**1.18 Perform a complete clinical examination and demonstrate ability in clinical decision-making.**

The student is able to correctly and autonomously perform a general physical examination in a cow/calf

The student is able to correctly and autonomously perform the examination of the respiratory and gastroenteric system

The student is able to diagnose the syndrome, and know the main differential diagnoses of the more common problems

On the basis of the main differential diagnoses, the student is able to propose a diagnostic protocol aimed at confirming or excluding the differential diagnoses

The student is able to perform a physical examination of a horse

The student properly reports findings of the physical examination in the medical records of the hospital

The student is able to correctly and autonomously perform a general physical examination in a dog or a cat

The student is able to correctly and autonomously perform the examination of a specific body system, including respiratory, gastroenteric, cardiocirculatory, uro-nephrologic, neurologic, dermatologic, orthopaedic and reproductive system

The student is able to draw up a problem list, prioritize the problems, and know the main differential diagnoses of the more common problems

The student, after having listed the differential diagnoses of each problem, is able to hypothesize the main diseases that may justify the main clinical signs

On the basis of the main differential diagnoses, the student is able to propose a diagnostic protocol aimed at confirming or excluding the differential diagnoses

The student is able to report correctly the results of the physical examination in the medical record of the patient

The student is able to interpret an electrocardiogram (ECG)

The student correctly measures the blood pressure

**1.19 Develop appropriate treatment plans and administer treatment in the interest of the animal under their care with regard to the resources available and to appropriate public health and environmental considerations.**

The student is able to identify the main objectives of the treatment in relation to the clinical case presented

The student is able to correctly identify the most suitable drugs and the route of administration

The student is able to plan an appropriate fluid therapy, including the choice of the type of solution, volume and rate of administration, according to the results of the physical examination and blood exams

The student has adequate knowledge about antibiotic resistance problems and guidelines for prudent use of antibiotics in animal practice (dogs and cats)

The student is able to read and interpret laboratory results concerning microorganism sensitivity/resistance to antibiotics

The student is able to decide when an antibiotic treatment is requested and to choose the appropriate antibiotic according to the antibacterial activity, route of administration, adverse effects and the specific patient clinical scenario

The student is able to decide when an antiinflammatory treatment is required and to choose the appropriate drug, dosage, and route of administration according to the specific patient clinical scenario

The student is able to decide when gastroprotective treatment is required and to choose the appropriate drug, dosage, and route of administration according to the specific patient clinical scenario

The student is able to get familiar with basic precautions on the current management of chemotherapeutic agents and the use of safety systems for injectable drugs

The student handles, prepares and marks surgical specimens of different neoplastic tissues and fills in a regular pathology submission form

**1.20 Attend in an emergency and perform first aid in common animal species\*. Prioritise situational urgency and allocate resources accordingly.**

The student is able to perform a triage and determine medical priorities in patients arriving to the emergency service

The student is able to select, perform and interpret initial diagnostics (e.g., blood gas analysis, blood lactate, glycemia, basic point of care ultrasound) for the assessment and stabilization of the patient in the emergency room

The student knows and is able to perform the principle techniques of oxygen therapy in the stabilization of the patient in the emergency room

The student is able to obtain a vascular access and knows the basic principles of fluid resuscitation in the stabilization of the patient in the emergency room

The student is able to prioritize physical and supplementary findings in an emergency assessment

The student is able to identify/choose emergency procedures and resources to stabilize the patient

**1.21 Assess the physical condition, welfare and nutritional status of an animal or group of animals and advise the client on principles of husbandry, feeding, reproduction, production, welfare, individual health, herd health and public health.**

The student is able to correctly evaluate the Body Condition Score (BCS) of a dog/cat and calculate s the Resting Energy Requirement (RER) and the Maintenance Energy Requirements (MER)

The student is able to correctly evaluate the energy content of pet food, interprets the label information and the ingredient list

The student is able to assess the nutritional needs of healthy dogs and cats (including puppies, adults, and elderly patients), prescribe the proper commercial food, and formulate personalized home made diets

The student is able to evaluate the commercial diets intended for the nutritional treatment of patients affected by different pathologies and prescribe the proper diet

The student recognizes the nutritional status of the horse

The student correctly evaluates the Body Condition Score (BCS) in horses

The student is able to assess the adequacy of the feed in regard to the physiological status (e.g. foal, adults, elderly patients, physical activity)

The student correctly identifies manifestations of behavioral patterns or behavioral disorders as indirect indicators of welfare and wellbeing

The student correctly identifies different feed used in horse feeding limited to hay, straw and concentrates

The student is able to improve the animal welfare by applying principles of feeding regimens to modulate main metabolic disturbances

The student recognizes common bovine breeds

The student correctly evaluates the Body Condition Score (BCS) in ruminants

**1.22 Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results.**

The student is able to recognize the type of sample necessary for a specific test

The student is able to recognize the adequacy of a blood sample and the principal pre-analytical artifacts

The student is able to perform a complete CBC (cell blood count) and interpret the main results

The student is able to perform a microhematocrit test and interpret the results

The student is able to perform and interpret the blood cross-match test (dog)

The student is able to correctly collect, preserve and transport blood and urine (catheterism and centesis) samples, using appropriate tubes

The student is able to fill the lab form (for in- house and referral labs)

The student is able to properly collect , preserve and transport a sample of faeces

The student is able to interpret the results of a biochemical blood profile  
The student is able to understand and correctly interpret the results of the exam of the feces  
The student knows how to collect, store and transport biopsy samples  
The student is able to collect a sample by Fine Needle Aspiration (FNA) for cytology  
The student is able to read and understand the results of the main laboratory tests and their relation with the reference values  
The student is able to understand and correctly interpret the results of the urinalysis  
The student is able to perform and correctly interpret the Coagulation panel results  
The student is able to make decision on whether using a diagnostic test, based upon sensitivity and specificity properties of the test, in a specific patient  
The student is able to choose the appropriate haematological test within a diagnostic workup  
The student is able to correctly handle biological samples in regard to transportation and conservation, as to preserve their adequacy and findings accuracy

**1.23 Communicate clearly and collaborate with referral and diagnostic services, including providing an appropriate history.**

The student is able to write a report used to refer a case to a diagnostic service (e.g., an oncological case that requires a specific diagnostic imaging investigation)  
The student is able to formulate a specific diagnostic question in the process of referral  
The student is able to write a medical report of the patient in the hospital database with proper reference to diagnostic tests performed

**1.24 Use basic diagnostic equipment and carry out an examination effectively as appropriate to the case, in accordance with good health and safety practice and current regulations. Understand the contribution of digital tools and artificial intelligence in veterinary medicine.**

The student is able to carry out a basic radiographic examination (i.e thorax, abdomen or skeletal system) identifying the proper animal positioning and exposure factors (see also competence 1.16)  
The student is able to use safely protection devices to reduce risks of radiation exposure for animals, himself/herself and others  
The student is able to describe the findings of the radiographic studies using the proper terminology  
The student is able to recognize the ultrasonographic images of the main organs and systems (e.g. abdomen)  
The student is able to identify strengths and weaknesses of the different advanced diagnostic imaging techniques and choose according to the needs of a patient  
The student is able to write a report on a radiographic study  
The student is able to carry out a blood gas analysis  
The student performs the US examination of the thorax and abdomen in a horse  
The student attends the collection of bronchoalveolar lavage fluid and is able to describe how to perform a bronchoalveolar lavage fluid  
The student attends a nasogastric intubation for diagnostic or therapeutic purposes

**1.25 Recognise signs of possible notifiable, reportable and zoonotic diseases as well as abuse of animals and take appropriate action, including notifying the relevant authorities.**

The student is able to recognize suspicious signs of possible notifiable, reportable and zoonotic diseases  
The student knows symptoms, diagnosis and risks of transmission associated with the main zoonotic diseases  
The student is able to produce a report on a notifiable disease to the competent authority  
The student knows how to communicate risks to pet owners

**1.26 Access the appropriate sources of data on information and legislation relating to animal care and welfare, animal movement, notifiable and reportable diseases, use of medicines, including responsible use of antimicrobials.**

The student knows the main sources of national and international legislation related to veterinary drugs (pharmacovigilance)  
The student is able to consult the list of licensed veterinary drugs in an appropriate source of data  
The student is able to check the correct dosage of a drug in an appropriate source of data

**1.27 Prescribe and dispense medicines correctly and responsibly in accordance with legislation and latest guidance.**

The student is able to calculate a drug dosage for a patient

The student administers the medicine via the correct route  
The student is able to understand the label and off-label drug use and prescription  
The student is able to produce a prescription for a dog/cat  
The student administers the medicine via the correct route

**1.29 Recommend and evaluate protocols for biosafety and biosecurity, and apply these principles correctly.**

The student applies standard biosecurity practices during and post clinical activity (e.g. gloves, disposable gown and boots, dressed properly, etc.)  
The student is able to correctly wear gloves, gowns, footwear, headcovers and surgical facemask as required according to the hospital biosafety and biosecurity guidelines  
The student is able to understand and apply standard biosecurity practices during clinical activity (e.g. self hygiene, cleaning and disinfection of tables and equipment) according to hospital guidelines  
The student properly deposits waste for selective collection with biosecurity conditions  
The student is able to correctly wear gloves, gowns, footwear, head covers and surgical facemask  
The student is able to understand and apply standard biosecurity practices during clinical activity (i.e. cleaning and disinfection of tables and equipment)  
The student is able to identify a patient suspected of being affected by a highly contagious infectious disease and plan appropriate countermeasures  
The student is able to identify a patient suspected of being affected by a zoonotic disease and plan appropriate countermeasures  
The student properly deposits waste for selective collection with biosecurity conditions

**1.32 Prevent, assess and manage pain.**

The student knows the main expressions of pain in ruminants

**1.33 Recognise when euthanasia is appropriate and perform it with respect of the animal and its owners, using an appropriate method, with due regard to the safety of those present; advise on ethical and legal disposal of the carcass.**

The student is able to recognize when euthanasia is justified in a patient  
The student is able to recognize when euthanasia is justified in a patient  
The student is able to advise the owners for the disposal of the carcass of the dead patient  
The student is aware of the importance to fully understand and respect the feelings of the owners in case of euthanasia