

European Coordination Committee for Veterinary Training (ECCVT) Day One Competences

Forewords

A. Competence is a concept that integrates knowledge, skills and attitudes. Competence requires acquisition of technical skills but further involves applying relevant knowledge, and having the confidence and ability to transfer what has been learnt to a variety of contexts.

B. In order to facilitate for educational establishments to meet the requirements of the overall basic veterinary competence that the EU has established (Directive 2013/55/EU, Article 38, a-f) it needs to be broken down to more specific “Day One Competencies” which ought to be included in the Directive.

C. ‘Day One Competence’ is the minimum standard required and is the starting point for a variety of roles in the veterinary profession (e.g. as Practitioner, Hygienist, Scientist, National Veterinary Services Officer, Animal Welfare Officer, Designated Veterinarian, ..). After graduation, ongoing professional development will be needed in whichever field the new graduate decides to enter, and some roles may require postgraduate training and further formal qualifications (e.g. Diplomate of a European College, PhD).

D. A new graduate who has achieved day one competence should be capable to independently perform appropriate entry-level tasks and duties of the veterinary profession and confident enough to practise veterinary medicine at a primary care level on their own, while knowing when it is appropriate to seek direction from more experienced colleagues. New graduates are likely to need more time to perform some procedures. Support and direction from more senior colleagues should be available.

E. Veterinary educational establishments are responsible for developing the day one competence of their students and ensuring that they have met the competences by the time they graduate. They are greatly assisted in this by the practising arm of the veterinary profession, which provides extra-mural work placements so that students can practise applying these competences in the workplace.

F. These day one competences are in agreement with the EU Directives, Regulations and Proposals related to veterinary professional qualifications, i.e.:

- Directive 2005/36/EC amended by Directive 2013/55/EU (on the recognition of professional qualifications);ⁱ
- Directive 2010/63/EU (on the protection of animals used for scientific purposes);
- Regulation 852/2004/EC (on the hygiene of foodstuffs);ⁱⁱ
- Regulation 853/2004/EC (on specific hygiene rules for food of animal origin);ⁱⁱⁱ
- Regulation 854/2004/EC (on specific rules for the organisation of official controls on products of animal origin intended for human consumption);^{iv}
- Regulation 1099/2009/EU (on the protection of animals at the time of killing);^v
- Proposals on Regulation on Animal Health^{vi} and Regulation on Official Controls^{vii}.
- OIE recommendations on the Competencies of graduating veterinarians (‘Day 1 graduates’) to assure National Veterinary Services of quality;^{viii}
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)^{ix}

1. Day One Competences

- 1.1 Understand the ethical and legal responsibilities of the veterinary surgeon in relation to patients, clients, society and the environment.
- 1.2 Demonstrate a knowledge of the organisation, management and legislation related to a veterinary business.
- 1.3 Promote, monitor and maintain health and safety in the veterinary setting; demonstrate knowledge of systems of quality assurance; apply principles of risk management to their practice.
- 1.4 Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned.
- 1.5 Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to colleagues and understandable by the public.
- 1.6 Work effectively as a member of a multi-disciplinary team in the delivery of services.
- 1.7 Understand the economic and emotional context in which the veterinary surgeon operates.
- 1.8 Be able to review and evaluate literature and presentations critically.
- 1.9 Understand and apply principles of clinical governance, and practise evidence-based veterinary medicine.
- 1.10 Use their professional capabilities to contribute to the advancement of veterinary knowledge, in order to improve the quality of animal care and veterinary public health.
- 1.11 Demonstrate ability to cope with incomplete information, deal with contingencies, and adapt to change.
- 1.12 Demonstrate that they recognise personal and professional limits, and know how to seek professional advice, assistance and support when necessary.
- 1.13 Demonstrate an ability of lifelong learning and a commitment to learning and professional development. This includes recording and reflecting on professional experience and taking measures to improve performance and competence.
- 1.14 Take part in self-audit and peer-group review processes in order to improve performance.
- 1.15 Obtain an accurate and relevant history of the individual animal or animal group, and its/their environment.
- 1.16 Handle and restrain animal patients safely and with respect of the animal, and instruct others in helping the veterinary surgeon perform these techniques.
- 1.17 Perform a complete clinical examination and demonstrate ability in clinical decision-making.
- 1.18 Develop appropriate treatment plans and administer treatment in the interests of the patients and with regard to the resources available.
- 1.19 Attend all species in an emergency and perform first aid.
- 1.20 Assess the physical condition, welfare and nutritional status of an animal or group of animals and advise the client on principles of husbandry and feeding.
- 1.21 Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results.
- 1.22 Communicate clearly and collaborate with referral and diagnostic services, including providing an appropriate history.
- 1.23 Understand the contribution that imaging and other diagnostic techniques can make in achieving a diagnosis. Use basic imaging equipment and carry out an examination effectively as appropriate to the case, in accordance with good health and safety practice and current regulations.

- 1.24 Recognise suspicious signs of possible notifiable, reportable and zoonotic diseases and take appropriate action, including notifying the relevant authorities.
- 1.25 Access the appropriate sources of data on licensed medicines.
- 1.26 Prescribe and dispense medicines correctly and responsibly in accordance with legislation and latest guidance.
- 1.27 Report suspected adverse reactions.
- 1.28 Apply principles of bio-security correctly, including sterilisation of equipment and disinfection of clothing.
- 1.29 Perform aseptic surgery correctly.
- 1.30 Safely perform sedation, and general and regional anaesthesia; implement chemical methods of restraint.
- 1.31 Assess and manage pain.
- 1.32 Recognise when euthanasia is appropriate and perform it with respect of the animal, using an appropriate method, whilst showing sensitivity to the feelings of owners and others, with due regard to the safety of those present; advise on disposal of the carcass.
- 1.33 Perform a systematic gross post-mortem examination, record observations, sample tissues, store and transport them.
- 1.34 Perform ante-mortem inspection of animals destined for the food-chain, including paying attention to welfare aspects; correctly identify conditions affecting the quality and safety of products of animal origin, to exclude those animals whose condition means their products are unsuitable for the food-chain.
- 1.35 Perform inspection of food and feed including post-mortem inspection of food producing animals and inspection in the field of food technology.
- 1.36 Advise on, and implement, preventative programmes appropriate to the species and in line with accepted animal health, welfare and public health standards.

2. Underpinning knowledge and understanding

In order to be able to undertake their professional duties effectively, new veterinary graduates will need a breadth of underpinning knowledge and understanding of the biological, animal and social sciences and laws related to the animal industries. This will include, but is not restricted to, the following:

- 2.1 Understanding of, and competence in, the logical approaches to both scientific and clinical reasoning, the distinction between the two, and the strengths and limitations of each.
- 2.2 Research methods and the contribution of basic and applied research to veterinary science.
- 2.3 The structure, function and behaviour of animals and their physiological and welfare needs, including healthy domestic animals, captive wildlife and laboratory-housed animals.
- 2.4 A knowledge of the businesses related to animal breeding, production and keeping.
- 2.5 The aetiology, pathogenesis, clinical signs, diagnosis and treatment of the common diseases and disorders that occur in the common domestic species.
- 2.6 Awareness of other diseases of international importance that pose a risk to national and international biosecurity and trade.
- 2.7 Legislation relating to animal care and welfare, animal movement, and notifiable and reportable diseases.
- 2.8 Medicines legislation and guidelines on responsible use of medicines, including responsible use of antimicrobials and anthelmintics.

- 2.9 The principles of disease prevention and the promotion of health and welfare.
- 2.10 Veterinary public health issues, including epidemiology, transboundary epizootic diseases, zoonotic and food-borne diseases, emerging and re-emerging diseases, food hygiene and technology.
- 2.11 Principles of effective interpersonal interaction, including communication, leadership, management and team working.
- 2.12 The ethical framework within which veterinary surgeons should work, including important ethical theories that inform decision-making in professional and animal welfare-related ethics.

3. List of subjects

The programme of studies leading to the evidence of formal qualifications in veterinary medicine shall include at least the subjects listed below.

Instruction in one or more of these subjects may be given as part of, or in association with, other courses.

Original (Directive 2005/36/EC Annex V.4)

Proposal (approved in 2012 by EAEVE/FVE)

Original (Directive 2005/36/EC Annex V.4)	Proposal (approved in 2012 by EAEVE/FVE)
<p>A. Basic subjects</p> <ul style="list-style-type: none"> — Physics — Chemistry — Animal biology — Plant biology — Biomathematics <p>B. Specific subjects</p> <p><i>a. Basic sciences:</i></p> <ul style="list-style-type: none"> — Anatomy (including histology and embryology) — Physiology — Biochemistry — Genetics — Pharmacology — Pharmacy — Toxicology — Microbiology — Immunology — Epidemiology — Professional ethics <p><i>b. Clinical sciences:</i></p> <ul style="list-style-type: none"> — Obstetrics — Pathology (including pathological anatomy) — Parasitology — Clinical medicine and surgery (including 	<p>A. Basic subjects</p> <ul style="list-style-type: none"> • Medical physics • Chemistry (inorganic and organic sections) • Animal biology, zoology and cell biology • Feed plant biology and toxic plants • Biomedical statistics <p>B. Specific veterinary subjects</p> <p><i>a. Basic sciences:</i></p> <ul style="list-style-type: none"> • Anatomy, histology and embryology • Physiology • Biochemistry • General and molecular genetics • Pharmacology, pharmacy & pharmacotherapy • Pathology • Toxicology • Parasitology • Microbiology • Immunology • Epidemiology • Professional communication • Professional ethics • Animal ethology • Animal welfare • Animal nutrition <p><i>b. Clinical sciences:</i></p> <ul style="list-style-type: none"> • Obstetrics, reproduction and reproductive disorders • Diagnostic pathology • Medicine and surgery including anesthesiology

<p>anesthetics) — Clinical lectures on the various domestic animals, poultry and other animal species — Preventive medicine — Radiology — Reproduction and reproductive disorders — Veterinary state medicine and public health — Veterinary legislation and forensic medicine — Therapeutics — Propaedeutics</p> <p>c. Animal production</p> <p>— Animal production — Animal nutrition — Agronomy — Rural economics — Animal husbandry — Veterinary hygiene — Animal ethology and protection</p> <p>d. Food hygiene</p> <p>— Inspection and control of animal foodstuffs or foodstuffs of animal origin — Food hygiene and technology — Practical work (including practical work in places where slaughtering and processing of foodstuffs takes place)</p>	<ul style="list-style-type: none"> • Clinical practical training in all common domestic animal species • Preventive medicine • Diagnostic imaging • State veterinary services and public health • Veterinary legislation, forensic medicine and certification • Therapy in all common domestic animal species • Propaedeutics of all common domestic animal species <p>c. Animal production</p> <ul style="list-style-type: none"> • Animal production and breeding • Economics • Animal husbandry • Herd health management <p>d. Food Safety and quality</p> <ul style="list-style-type: none"> • Inspection and control of food and feed • Food hygiene and food microbiology • Practical work in places for slaughtering and food processing plants • Food technology including analytical chemistry
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“The content and distribution of the theoretical and practical training among the various groups of subjects shall be balanced and coordinated in such a way that the knowledge and experience may be acquired in a manner which will enable the veterinary surgeons to perform all their duties.”

Annex 1 - EU Directive requirements for veterinary degrees

All professional veterinary degrees offered in the European Union are required to meet certain 'minimum training requirements'. These are set out in Article 38 of the EU Directive on the recognition of professional qualifications (Directive 2005/36/EC, as amended by Directive 2013/55/EU), as follows:

The training of veterinary surgeons shall comprise a total of at least five years of full-time theoretical and practical study, which may in addition be expressed with the equivalent ECTS credits, at a university or at a higher institute providing training recognised as being of an equivalent level, or under the supervision of a university, covering at least the study programme referred to in point 5.4.1 of Annex V.

Training as a veterinary surgeon shall provide an assurance that the professional in question has acquired the following knowledge and skills:

(a) adequate knowledge of the sciences on which the activities of a veterinary surgeon are based and of the Union law relating to those activities;

(b) adequate knowledge of the structure, functions, behaviour and physiological needs of animals, as well as the skills and competences needed for their husbandry, feeding, welfare, reproduction and hygiene in general;

(c) the clinical, epidemiological and analytical skills and competences required for the prevention, diagnosis and treatment of the diseases of animals, including anaesthesia, aseptic surgery and painless death, whether considered individually or in groups, including specific knowledge of the diseases which may be transmitted to humans;

(d) adequate knowledge, skills and competences for preventive medicine, including competences relating to inquiries and certification;

(e) adequate knowledge of the hygiene and technology involved in the production, manufacture and putting into circulation of animal feedstuffs or foodstuffs of animal origin intended for human consumption, including the skills and competences required to understand and explain good practice in this regard;

(f) the knowledge, skills and competences required for the responsible and sensible use of veterinary medicinal products, in order to treat the animals and to ensure the safety of the food chain and the protection of the environment."

Acknowledgements

- The European Coordination Committee for Veterinary Training (ECCVT) was created in 2004. Through this committee the three founding organisations the "European Association of Establishments for Veterinary Education" (EAEVE), the "European Board of Veterinary Specialisation" (EBVS) and the "Federation of Veterinarians of Europe" (FVE) aim to coordinate their views on veterinary education. ECCVT is supervised by the organisations' executive committees/boards. www.fve.org/education/eccvt.php
- FVE policy paper on Veterinary Education (2014) http://www.fve.org/uploads/publications/docs/008_fve_edu_policy_ga_22_nov_2014_adopoted.pdf
- EAEVE Strategic plan 2015-2020 (2015) http://www.eaeve.org/fileadmin/downloads/news/SWOT_SP_EAEVE_2015-20.pdf

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- i <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02005L0036-20140117&from=EN>
- ii <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:139:0001:0054:en:PDF>
- iii <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:139:0055:0205:EN:PDF>
- iv <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:226:0083:0127:EN:PDF>
- v <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:303:0001:0030:EN:PDF>
- vi http://ec.europa.eu/dgs/health_food-safety/pressroom/docs/proposal_ah_en.pdf
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- viii http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/DAY_1/DAYONE-B-ang-vC.pdf
- ix http://www.enqa.eu/wp-content/uploads/2013/06/ESG_3edition-2.pdf