

## **Annex 2. List of subjects and Day One Competences**

*(as approved by ECCVT on 17 January 2019)*

### **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 it needs to be broken down to more specific “Day One Competences”: Overall basic veterinary competence is currently laid down in different pieces of the EU legislation, namely

- ✓ Directive 2005/36/EC amended by Directive 2013/55/EU (on the recognition of professional qualifications);
- ✓ Directive 2010/63/EU (on the protection of animals used for scientific purposes);
- ✓ Regulation 852/2004/EC (on the hygiene of foodstuffs) ;
- ✓ Regulation 853/2004/EC (on specific hygiene rules for food of animal origin);
- ✓ Regulation 854/2004/EC (on specific rules for the organisation of official controls on products of animal origin intended for human consumption)
- ✓ Regulation (EU) 2017/625 (on official controls)
- ✓ Regulation 1099/2009/EU (on the protection of animals at the time of killing) as amended by Regulation (EU) 2017/625;
- ✓ Regulation (EU) 2016/429 (on transmissible animal diseases and amending and repealing certain acts in the area of animal health); and
- ✓ Proposal on Regulation on veterinary medicinal products

C. Overall basic competence ought to encompass all references in the different pieces of the EU legislation to ensure consistency on the recognition of professional qualifications in European Union and beyond.

D. ‘Day One Competences’ is the minimum standard required and is the starting point for a variety of roles in the veterinary profession. 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).

E. A new graduate who has achieved Day One Competences 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.

F. Veterinary educational establishments are responsible for developing the Day One Competences 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 Extramural Practical Training so that students can practise applying these competences in the workplace.

G. These Day One Competences are in agreement with the above-mentioned EU Directives, Regulations and Proposals related to veterinary professional qualifications and the following references:

- OIE recommendations on the Competencies of graduating veterinarians ('Day 1 graduates') to assure National Veterinary Services of quality<sup>1</sup>
- European Commission: A working document on the development of a common education and training framework to fulfil the requirements under the Directive<sup>2</sup>
- FVE & EAEVE report on European Veterinary Education in Animal Welfare, Science, Ethics and Law<sup>3</sup>
- Standards and Guidelines for Quality Assurance in the European Higher Education Area (2015)<sup>4</sup>
- Final Recommendations of the 4<sup>th</sup> OIE Global Conference on Veterinary Education<sup>5</sup>
- One Health approach as recognised by WHO<sup>6</sup> and OIE<sup>7</sup>

## 1. Day One Competences

1.1 Understand the ethical and legal responsibilities of the veterinarian in relation to animals under his/her care, the environment, clients, policies and society.

1.2 Demonstrate knowledge of the organisation, management and legislation related to a veterinary business economics and employment rights.

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 and in full respect of confidentiality and privacy.

1.5 Prepare accurate clinical and client records, and case reports when necessary, in a form satisfactory to colleagues and understandable by the public.

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<sup>1</sup> [http://www.oie.int/fileadmin/Home/eng/Support\\_to\\_OIE\\_Members/Vet\\_Edu\\_AHG/DAY\\_1/DAYONE-B-ang-vC.pdf](http://www.oie.int/fileadmin/Home/eng/Support_to_OIE_Members/Vet_Edu_AHG/DAY_1/DAYONE-B-ang-vC.pdf)

<sup>2</sup> [http://ec.europa.eu/environment/chemicals/lab\\_animals/pdf/guidance/education\\_training/en.pdf](http://ec.europa.eu/environment/chemicals/lab_animals/pdf/guidance/education_training/en.pdf)

<sup>3</sup> [http://www.carodog.eu/wp-content/uploads/2014/10/full\\_report\\_aw\\_curriculum\\_adopted3.pdf](http://www.carodog.eu/wp-content/uploads/2014/10/full_report_aw_curriculum_adopted3.pdf)

<sup>4</sup> [http://www.enqa.eu/wp-content/uploads/2013/06/ESG\\_3edition-2.pdf](http://www.enqa.eu/wp-content/uploads/2013/06/ESG_3edition-2.pdf)

<sup>5</sup> [http://www.oie.int/eng/vet-education-conf2016/recommendations/A\\_Final\\_recommendations\\_Thailand\\_education.pdf](http://www.oie.int/eng/vet-education-conf2016/recommendations/A_Final_recommendations_Thailand_education.pdf)

<sup>6</sup> <http://www.who.int/features/qa/one-health/en/>

<sup>7</sup> <http://www.oie.int/en/for-the-media/onehealth/>

- 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 and One Health concept, in order to improve animal health and welfare, 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 veterinarian 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 animals under their care with regard to the resources available.
- 1.19 Attend in an emergency and perform first aid in common animal species\*.
- 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 signs of possible notifiable, reportable and zoonotic diseases as well as abuse 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 through the appropriate channel.
- 1.28 Apply principles of bio-security correctly.
- 1.29 Perform aseptic procedures appropriately.

- 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 related food technology.
- 1.36 Advise on, and implement, preventive and eradication 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, the contribution of basic and applied research to veterinary science and implementation of 3Rs (Replacement, Reduction, Refinement).
- 2.3 The structure, function and behaviour of animals and their physiological and welfare needs.
- 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 animal 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 antiparasitics.
- 2.9 The principles of disease prevention and the promotion of health and welfare.
- 2.10 Veterinary public health issues, e.g. 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.

Although all subjects are listed into one category, some of them relate to more than one category. The subjects linked to Professional Knowledge are included in the listed categories.

#### A. Basic Subjects

- Medical physics
- Chemistry (inorganic and organic sections)
- Animal biology, zoology and cell biology
- Feed plant biology and toxic plants
- Biomedical statistics

#### B. Specific veterinary subjects

##### a. *Basic Sciences:*

- Anatomy, histology and embryology
- Physiology
- Biochemistry
- General and molecular genetics
- Pharmacology, pharmacy and pharmacotherapy
- Pathology
- Toxicology
- Parasitology
- Microbiology
- Immunology
- Epidemiology
- Information literacy and data management
- Professional ethics and communication
- Animal health economics and practice management
- Animal ethology
- Animal welfare
- Animal nutrition

##### b. *Clinical Sciences:*

- Obstetrics, reproduction and reproductive disorders
- Diagnostic pathology

- Medicine
- Surgery
- Anaesthesiology
- Clinical practical training in common animal species\*
- Preventive medicine
- Diagnostic imaging
- Therapy in common animal species\*
- Propaedeutics of common animal species\*

***c. Animal production:***

- Animal production, including breeding, husbandry and economics
- Herd health management

***d. Food Safety and Quality, Veterinary Public Health and One Health Concept:***

- Veterinary legislation including official controls, regulatory veterinary services, forensic veterinary medicine and certification
- Control of food, feed and animal by-products
- Zoonoses
- Food hygiene and food microbiology
- Food technology

\*Common animal species as described in the list of Indicators of the ESEVT SOP.

The content and distribution of the theoretical and practical training among the various groups of subjects must be balanced and coordinated in such a way that the knowledge and experience may be acquired in a manner which will enable the veterinarian to perform all their duties.