

Competence Model for the Diploma Programme in Veterinary Medicine at Vetmeduni Vienna



Introduction & Theoretical Competence Model



Background

In this document, you will find an example of good practice for a competence model for a Diploma Programme in Veterinary Medicine developed at Vetmeduni Vienna. In contrast to the other examples of good practice, this model was not developed in course of the project 'Internal Quality Management: Evaluating and Improving Competence Based Higher Education'. This competence model was developed during a pilot project in 2013. In this pilot project a training course in doing evaluation at Vetmeduni Vienna was provided. The goal of the training course was to empower representatives of different stakeholder groups of the Diploma Programme in Veterinary Medicine in doing evaluations. Students, teachers, administrative staff as well as decision makers were part of the training course. Together they developed the competence model during spring and summer 2013.

After the pilot project, the Vetmeduni Vienna participated in the international project 'Internal Quality Management: Evaluating and Improving Competence Based Higher Education'. Even though, the theoretical framework for a competence model was further developed at the international project, the Vetmeduni Vienna decided to stay with their competence model developed in the pilot study. This decision was necessary for monitoring purposes. It is the intention of Vetmeduni Vienna to monitor the implementation of a new curriculum by performing an annual screening. Staying with the competence model ensures comparable screening results and hence tracking of students competences over the years.

The adaptation of the competence model will be discussed after the curriculum was fully implemented which will be in 2019.

In the following we present a commented version of the competence model.

Competence model for a Diploma Programme in Veterinary Medicine developed by Vetmeduni Vienna

The competence model is based on the 'Day one competences' of EAEVE (from year 2013).

The competences were grouped into five competence areas, which are

- Personal competences (11 competences)
- Medical competences (31 competences)
- Scientific competences (5 competences)
- Economic competences (4 competences)
- Societal competences (4 competences)

The competence levels were defined for students of the 6th and the 10th semester. The 6th semester students are in the middle of their studies. They were chosen as measures can be initiated to overcome possible shortcomings until the end of their studies. The 10th semester students are more at the end of their studies when they start specializing in a concrete area but they are still organized in groups and hence can easily take part in the competence screening.

The definition of competence levels follows the European Qualification Framework but was adapted for the pilot project's needs. This formulation of competence levels works well for the Vetmeduni Vienna. However, we do not recommend using it in other contexts as the purpose of the European Qualification Framework is comparing national education systems. The purpose of the competence screening is finding out strengths and weaknesses of a single study programme. These purposes get easily mixed up when using the same formulation; the difference between the two purposes needs to be explained precisely to users. Hence, we recommend using another formulation of competence levels. The competence levels are displayed at the end of this section.

In the following, we present the theoretical competence model. The competence model was developed in German language. We additionally provide a suggestion for a translation to English language (but needs to be checked for correct scientific terminology). At the end of this document we provide guiding questions for the revision of the competence model.

Competence model for the Diploma Programme in Veterinary Medicine

Competences in German language		6 th semester		10 th semester		Suggestion for the translation of competences - English version
Persönliche Kompetenzen		Know-ledge	Skill	Know-ledge	Skill	Personal competences
1	Angemessene Kommunikation mit dem/der TierbesitzerIn hinsichtlich Diagnose und Behandlungsmöglichkeiten	1	0	3	3	Appropriate Communication with the animal owner in terms of diagnosis and treatment options
2	Kompetente Wissensvermittlung und Kommunikationsfähigkeit auf verschiedenen Ebenen: gegenüber Fachpersonal, TierärztInnen, Behörden und Dienststellen	3	2	4	3	Competent transfer of knowledge and communication on various levels: experts, veterinarians, authorities and offices
3	Ethische Verantwortung im tierärztlichen Beruf	3	2	4	3	Ethical Responsibility of the veterinarian
4	Analytische, lösungsorientierte und effiziente Arbeitsweise	2	2	4	3	Analytical, outcome-driven and efficient work
5	Verantwortungsbewusste, sachliche Handlungsweise	3	3	4	4	Responsible and objective actions
6	Entscheidungsfähigkeit und reflektierter Umgang mit Unsicherheit	2	2	3	3	Ability to make decisions and deliberation in cases of uncertainty
7	Kooperations- und Teamfähigkeit	3	2	4	3	Ability to cooperate and work in a team
8	Führungskompetenz	1	1	2	2	Leadership competences
9	Konfliktlösungsorientiertes Handeln	2	1	3	3	Taking appropriate actions to resolve conflicts
10	Reflexionsfähigkeit bezüglich der eigenen fachlichen Kompetenzen und Grenzen	2	1	4	3	Reflection capacity with respect to one's own professional competences and limitations
11	Kompetenzen zum lebenslangen Lernen und Weiterbilden (=Motivation und Strategien)	2	2	5	4	Competences for lifelong learning and further education (= motivation and strategies)

Medizinisch, fachliche Kompetenzen		Know-ledge	Skill	Know-ledge	Skill	Medical competences
1	Kenntnis und Berücksichtigung der Bedürfnisse der Tiere	4	3	4	4	Knowledge and consideration of animals' needs
2	Bau und Funktion gesunder Tiere (z.B.: Wissen = ich weiß, wo der N. radialis verläuft; Können = ich finde diesen am Tier)	4	3	4	4	Structure and function of healthy animals (e.g. knowledge = I know where the N. radialis runs; practice = I can find it on the animal)
3	Erhebung einer Anamnese	3	2	4	3	Raising medical history (anamnesis)
4	Fixationstechniken und Zwangsmaßnahmen	3	2	5	3	Fixation techniques of animals
5	Hygienisches Arbeiten	5	4	5	4	Hygienic working
6	Prinzipien der Adspektion, Palpation, Auskultation und Perkussion	3	2	5	3	Principles of adspection, palpation, auscultation and percussion
7	Physiologische Befunde und Bedeutung abweichender Befunde	3	2	5	3	Physiological findings and importance of deviating findings
8	Spezielle, organbezogene Untersuchungsgänge (Orthopädie, Gynäkologie, Neurologie, Augen, Herz, etc.)	2	1	3	2	Special, organ-specific examinations (orthopaedics, gynaecology, neurology, eyes, heart, etc.)
9	Zusammenfassung und Gewichtung von Symptomen	2	1	4	3	Summary and weighting of symptoms
10	Sichere Durchführung häufig eingesetzter bildgebender Verfahren (z.B.: Röntgen, Ultraschall) unter Beachtung relevanter Vorschriften	3	2	4	3	Safe execution of frequently used imaging techniques (e.g. X-ray, ultrasound) with respect to relevant regulations
11	Grundlagen der Laboruntersuchung (Probenentnahmen, Versand und Untersuchungstechniken)	3	2	4	3	Basics of laboratory examinations (taking samples, shipping, examination techniques)
12	Interpretation der Befunde aus der klinischen Untersuchung mit den weiterführenden Untersuchungen	3	2	5	3	Interpretation of clinical and further diagnostic findings

13	Erstellen von Diagnosen und Differentialdiagnosen beruhend auf den erhobenen Befunden	2	1	4	3	Making a diagnosis and a differential diagnosis based on relevant findings
14	Erstellung von Prognosen	2	1	4	3	Establishing a prognosis
15	Therapieplan mit Kosteneinschätzung (Kostenvoranschlag)	1	0	4	3	Treatment plan and estimation of costs
16	Dokumentation einer Krankengeschichte	1	0	3	2	Documentation of the medical history
17	Formulierung von Überweisungen und Arztbriefen	1	0	3	2	Formulation of referral and doctor's letters
18	Notfallversorgung (z.B. bei Bewusstlosigkeit, Herzstillstand, Allergien) und Erstversorgung (z.B. von Frakturen und Verletzungen) bei allen Tierarten	2	2	4	3	Care in cases of emergency (e.g. unconsciousness, cardiac arrest, allergies) and first aid (e.g. fractures and injuries) for all animals
19	Injektions- und Infusionstechniken	2	1	4	3	Techniques for injection and infusion
20	Narkosetechniken (Injektion/Inhalation)	2	1	4	3	Techniques for anaesthesia (injection/inhalation)
21	Vorbereitung einer Operation (Antisepsis/OP Besteckkunde)	2	1	4	3	Preparations for operations (antisepsis/set of instruments)
22	Nahttechniken	2	1	4	3	Suturing techniques
23	Standardoperationen	2	1	4	3	Standard operations
24	Nutzen, Wirkung und Nebenwirkung einer Therapie	2	1	4	3	Benefits, effects and side effects of therapies
25	Richtige und gesetzeskonforme Anwendung und Verschreibung von Arzneimitteln	2	1	5	4	Correct application and prescription of drugs conforming to the law (compliance)
26	Euthanasie (erkennen, korrekte Durchführung und Begleitung sowie korrekte Entsorgung des Kadavers)	1	0	4	3	Euthanasia (recognition, correct execution and attendance as well as correct disposal of the cadaver)

27	Maßnahmen zur Prävention von Erkrankungen sowie Fähigkeiten, den/die TierbesitzerIn bei der Umsetzung der Maßnahmen zu beraten bzw. die Maßnahmen anzuordnen	2	1	4	3	Actions for prevention of illnesses and ability to advise the animal's owner in carrying out certain actions of prevention
28	Belange des öffentlichen Veterinärwesens inklusive Zoonosen	1	1	4	3	Interests of public veterinary issues including zoonoses
29	Lebensmittelhygiene bezüglich der Schlacht tieruntersuchung	3	2	5	3	Food hygiene in terms of examining animals for slaughter
30	Lebensmittelhygiene bezüglich der Fleischuntersuchung	3	2	5	3	Food hygiene in terms of examining meat
31	Lebensmittelhygiene bezüglich: Lebensmittelsicherheits- und Verbraucherschutzgesetz (LMSVG) sowie Hygienekontrollen nach den LMSVG sowie Erstellen von Befunden und Gutachten	1	0	3	2	Food hygiene in terms of: food safety and consumer protection law as well as hygiene controls according to said law as well as appropriate reporting of results

Betriebswirtschaftliche Kompetenzen		Know-ledge	Skill	Know-ledge	Skill	Economic competences
1	Führen einer tierärztlichen Ordination einschließlich einer Hausapotheke	0	0	2	1	Managing a veterinary practice including a medicine chest
2	Betriebswirtschaftliche Organisation einer tierärztlichen Praxis	1	0	3	2	Business or financial organisation of a veterinary practise
3	Dokumentation und Qualitätssicherung in der Praxis	2	1	3	2	Documentation and quality assurance in a veterinary practice
4	Rechtskenntnis des besonderen Verwaltungsrechts, insbesondere das Veterinärwesen betreffend Überweisung, Evaluation und Behandlungen	1	0	3	2	Knowledge of the administrative law, especially according to veterinary issues like referrals, evaluation and treatments

Gesellschaftliche Kompetenzen		Know-ledge	Skill	Know-ledge	Skill	Social competences
1	Nationale und internationale Richtlinien und Verordnungen bzgl. Tier-, Konsumenten- und Umweltschutz	1	0	3	2	National and international guidelines and decrees relating to protection of animals, consumers and the environment
2	Ethisch einwandfreier Umgang mit Tier, Mensch und Natur	3	2	5	4	Ethically faultless contact with animals, humans and nature
3	Prinzipien der Kollegialität und Gleichbehandlung	3	2	4	3	Principles of collegiality and equality treatment
4	Verantwortung für die Volksgesundheit und den Berufsstand	2	1	4	3	Responsibility for public health and the veterinary profession

Competence levels		Suggestion for English version
Wissen	Level	Knowledge
Kein/Wenig Wissen	0	(Almost) no knowledge
Grundlegendes Allgemeinwissen	1	Basic general knowledge
Grundlegendes Faktenwissen in einem Bereich – auf niedriger Stufe	2	Basic factual knowledge in a field of study on a low level
Grundlegendes Faktenwissen in einem Bereich – auf höherer Stufe	3	Basic factual knowledge in a field of study on a high level
Detailliertes Faktenwissen und Kenntnisse von Grundsätzen, Verfahren und allgemeinen Begriffen in einem Fachbereich – auf niedriger Stufe	4	Detailed factual knowledge and knowledge of principles, methods and general terminology in a field of study on a low level
Detailliertes Faktenwissen und Kenntnisse von Grundsätzen, Verfahren und allgemeinen Begriffen in einem Fachbereich – auf höherer Stufe	5	Detailed factual knowledge and knowledge of principles, methods and general terminology in a field of study on a high level

Competence levels		Suggestion for English version
Können	Level	Skills
Kein Können	0	No skills
Grundlegende praktische Fertigkeiten zur Ausführung einfacher Aufgaben	1	Basic practical skills to carry out easy tasks
Grundlegende praktische Fertigkeiten zur Ausführung von komplexeren Routineaufgaben und zur Lösung von Routineproblemen unter Verwendung einfacher Regeln und Werkzeuge – auf niedriger Stufe	2	Basic practical skills in order to carry out more complex routine tasks and solve routine problems using simple rules and methods – on a low level
Grundlegende praktische Fertigkeiten zur Ausführung von komplexeren Routineaufgaben und zur Lösung von Routineproblemen unter Verwendung einfacher Regeln und Werkzeuge – auf höherer Stufe	3	Basic practical skills in order to carry out more complex routine tasks and solve routine problems using simple rules and methods – on a high level
Fortgeschrittene praktische Fähigkeiten zur Ausführung von komplexen Aufgaben und zur Lösung von Problemen, die über Routinefälle hinausgehen unter Auswahl und Verwendung geeigneter Methoden, Materialien und Informationen – auf niedriger Stufe	4	Advanced practical skills in order to carry out very complex routine tasks and solve problems more complex than routine problems using adequate methods, material and information – on a low level
Fortgeschrittene praktische Fähigkeiten zur Ausführung von komplexen Aufgaben und zur Lösung von Problemen, die über Routinefälle hinausgehen unter Auswahl und Verwendung geeigneter Methoden, Materialien und Informationen – auf höherer Stufe	5	Advanced practical skills in order to carry out very complex routine tasks and solve problems more complex than routine problems using adequate methods, material and information – on a high level

The competence model was developed in the course of the project

'Internal Quality Management: Evaluating and Improving Competence-Based Higher Education'

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Further information on the project is available on the Erasmus+ platform for project results:

- Go to <http://ec.europa.eu/programmes/erasmus-plus/projects>.
- Enter the project title 'Internal Quality Management: Evaluating and Improving Competence-Based Higher Education' in the search bar to get to the project homepage.