Freie Universität Berlin

School of Veterinary Medicine Freie Universität Berlin

Appendices of the **Self Evaluation Report** for the European Association of Establishments for Veterinary Education | **Full Visitation 10 – 14 June 2024**

Fachbereich Veterinärmedizin
der Freien Universität Berlin

Contents

Addendum: The impact of the COVID-19 crisis

Introduction

The COVID-19 crisis also affected our school severely from 2020 to 2022 and had a major impact on almost all areas of teaching, research and services.

Area 1. Objectives, Organisation and QA Policy

A Corona Task Force was established at Freie Universität and also at the School of Veterinary Medicine. Within just a few days in March 2020, it was necessary to completely switch to an operation in which only essential duties of animal care and restricted operation of clinical and diagnostic facilities of the VEE were allowed with the minimum staff required. Employees in all other areas had to work from home.
A monthly newsletter was established to inform all employees and students (in presence at the school and also at home in the home office) about all new developments and plans. Ad hoc information, e.g. about new, adapted hygiene rules, was provided via email distribution lists and social media.

Area 2. Finances

The COVID-19 pandemic also had an impact on the department's finances. Due to the severe restrictions on public life in Berlin, the number of cases and the resulting revenue from patient services fell significantly, but rose again thereafter, partly as a result of significant increases in the number of small animal pet owners during the pandemic.

Area 3. Curriculum

Immediately after the beginning of the SARS-CoV-2 pandemic, the "CorOnline-Teaching" concept was developed and established at the school in March/April 2020. The primary goal was to ensure that students could continue their studies without interruption for a whole semester or year. This goal could be achieved!
With the active support of the central FU Berlin services ZEDAT and CeDis, of the VEE's IT Service and of all teaching staff at the school, the ad hoc switch to digital learning was efficient and successful. During the summer semester 2020, all hands-on teaching had to go online and very creative concepts were developed by the teaching staff across disciplines. The enforcement of online teaching initially also affected the final clinical rotation. However, due to fast negotiations with the authorities, the final clinical rotation went back to practical teaching at the end of April 2020 with a completely revised concept that ensured that at least half of the rotation time was hands-on teaching. From the winter semester 2020/2021, essential clinical training (propaedeutics, case work and final rotations) as well as important laboratory courses (e.g. anatomy, physiology, microbiology, parasitology and food hygiene) gradually returned to full operation under effective, very strict hygiene measures. In addition, a protective shield was put in place for students with an additional learning support programme through additional tutor positions and adapted examination rules.

Area 4. Facilities and equipment

The VEE Hygiene Commission developed and established consistent and effective hygiene concepts for the different areas of the school and the various infection scenarios (e.g. epidemic precautions, specific outbreak in a facility).
In order to enable the necessary practical training, the respective students, teaching staff and technical staff were tested for SARS-CoV-2 every day before these exercises/courses. For this

purpose, a Corona test center operated by scientific staff and laboratory staff of the VEE was established and operated by the VEE.

Area 5. Animal resources and teaching material of animal origin

As already described, the number of patients fell significantly at times as a result of very strict restrictions on travel, nationwide contact restrictions and the strict hygiene rules of the VEE. In general, all clinics were affected but the farm animal clinic in particular, as the ambulance service could no longer be provided at times. This subsequently led also to a significant drop in the number of sections in the pathology.

Area 6. Learning resources

Due to the necessity of comprehensive online teaching, the FU Berlin purchased and implemented the online meeting platform Cisco Webex, the streaming service Vbrick Rev and the all-in-one connection tool Cisco Jabber. Furthermore, all lecture halls and most of seminar rooms were equipped with the appropriate equipment. Since that time, these ressources are used intensively at the VEE for a wide variety of teaching and learning formats.

Area 7. Student admission, progression and welfare

As described, numerous measures have been taken to ensure that veterinary medicine studies at the VEE can continue under pandemic conditions. In addition to the measures described above, a special tutoring programme was established to increase students' learning success in this special situation. In order to do justice to the different life situations (foreign students, students in their home countries, alternating between classroom teaching and online teaching), most lectures were also offered online time-indepently. In addition, the Freie Universität Berlin's “support.point” programme was established to support student welfare and provide assistance in difficult life situations. The VEE also initiated a Corona donation programme to support students with Corona-related financial difficulties.

Area 8. Student assessment

Due to effective negotiation with authorities and strict hygiene measures, the VEE was able to largely adhere to the examination regulations at all times with the forseen presence formats (MC examinations, OSCE examinations or oral examinations). For this purpose, students were tested at the VEE Corona Test Center before each exam or they presented a negative test from the respective day. Overall, examination performance remained good and students showed a very high level of discipline.

Area 9. Academic and support staff

Due to the hygiene measures implemented and the efforts of all employees, it was possible to ensure high-quality teaching, clinical patient care and diagnostic services during the pandemic. No COVID-19 outbreaks or SARS-CoV-2 transmissions were detected at the VEE during this time (staff and students). The daily SARS-CoV-2 tests on presence days, the additional diagnostic service in the Corona Test Centre, the strict distancing rules and the permanent obligation to wear masks were nevertheless a great burden for everyone involved.

Area 10. Research programmes, continuing and postgraduate education

The COVID-19 crisis has had a major impact on research at the VEE. Due to state regulations, all laboratory work (with the exception of diagnostic services) had to be completely discontinued for several months in 2020. Therefore, research projects could not be carried out or completed in the planned time and doctoral projects faced major delays. Fortunately, the funding for most of the projects could be extended by 6 months by the funding organisations, so that most of the projects could finally be successfully finished.

However, the COVID-19 crisis also had a positive special effect on research at the VEE. As the VEE is the only school in Germany to operate a BSL3 high-security laboratory with integrated hamster housing, numerous projects on SARS-CoV-2 basic research and vaccine research have been carried out. Many projects on SARS-CoV-2 bioaerosols and respiratory masks have also been carried out in the existing bioaerosol chamber.

A. Current academic staff, qualifications, their FTE, teaching responsibilities and their affiliations to centers and units

All academic staff included in this table is financed by core-funded resources and responsible for teaching and research tasks (as per: 30.09.2023).

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
01	ALSHAMY ZAHER	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
01	AL MASRI SALAH	Academic Staff, permanent	Dr. med. vet.	1	1.00		16.0
01	BAHRAMSOLTANI MAHTAB	Professor	Prof. Dr. med. vet.	1	1.00		8.0
01	BONACK ANNEKATRIN	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
01	PLENDL JOHANNA	Professor	Prof. Dr. med. vet.	1	1.00		9.0
01	FISCH ANNE SOPHIE	Academic Staff, temporary		1	0.50	1	2.0
01	HERRE CHRISTINA	Academic Staff, temporary		1	1.00	1	4.0
01	KURDA TABITA	Academic Staff, temporary		1	0.50	1	2.0
01	LIEBE FRANZISKA	Academic Staff, temporary		1	1.00	1	4.0
01	SCHIRONE REBECCA	Academic Staff, temporary		1	1.00	1	4.0
01	VIDAK JONATHAN	Academic Staff, temporary		1	0.50	1	2.0
02	ASCHENBACH JÖRG	Professor	Prof. Dr. med. vet.	1	1.00		6.8
02	DRÖSSLER LINDA	Academic Staff, temporary		1	0.50	1	2.0
02	EICHLER FABIENNE	Academic Staff, temporary		1	0.50	1	2.0
02	SCHERMULY ISABEL	Academic Staff, temporary		1	0.80	1	3.2
02	ABU AMASHEH SALAH	Professor	Prof. Dr. rer. nat.		1.00		9.0
02	NIESNER RALUCA	Professor	Prof. Dr. rer. nat.		1.00	1	2.0
02	STEIN LAURA	Academic Staff, temporary			0.50	1	2.0
03	WESTERMANN SIMONE	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
03	DREHER CHRISTIAN	Academic Staff, temporary			1.00	1	4.0
03	EINSPANIER RALF	Professor	Prof. Dr. Dr.		1.00		9.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
03	GABLER CHRISTOPH	Academic Staff, permanent	PD Dr. rer. nat.		1.00		7.0
03	SHARBATI SOROUSH	Academic Staff, permanent	PD Dr. rer. nat.		1.00		8.0
03	MATING MORITZ	Academic Staff, temporary			0.50	1	2.0
03	STEIN TORSTEN	Academic Staff, temporary	Dr. rer. nat.		1.00	1	4.0
04	ZENTEK JÜRGEN	Professor	Prof. Dr. med. vet.	1	1.00		9.0
04	FUHRMANN LAURA	Academic Staff, temporary		1	0.50	1	2.0
04	GOODARZI BOROOJENI FARSHAD	Academic Staff, temporary	PhD	1	0.50	1	2.0
04	GRZESKOWIAK LUKASZ	Academic Staff, temporary	PhD		1.00	1	4.0
04	SALIU EVA MARIA	Academic Staff, temporary	PhD	1	1.00	1	4.0
04	SCHULZE HOLTHAUSEN JOHANNES	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
04	VAHJEN WILFRIED	Academic Staff, permanent	Dr. rer. nat.		1.00		8.0
05	OSTERRIEDER NIKOLAUS	Professor	Prof. Dr. med. vet.	1	1.00		9.0
05	TRIMPERT JAKOB	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
05	KOSSAK LISA	Academic Staff, temporary		1	0.50	1	2.0
05	KAUFER BENEDIKT	Professor	Prof. Dr. rer. nat.		1.00		9.0
05	LANGNER CHRISTINE	Academic Staff, temporary			0.50	1	2.0
05	VEIT MICHAEL	Academic Staff, permanent	PD Dr. rer. nat.		1.00		8.0
05	REICH JANA	Academic Staff, temporary			0.65	1	2.6
05	VIDAL RICARDO MARTIN	Academic Staff, temporary			0.50	1	2.0
06	LAUBSCHAT ALEXANDRA	Academic Staff, temporary		1	0.50	1	2.0
06	KUNDIK ARKADI	Academic Staff, temporary			0.50	1	2.0
06	SCHLOSSER BRANDENBURG JOSEPHIN	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
06	HARTMANN SUSANNE	Professor	Prof. Dr. rer. nat.		1.00		8.0
06	RAUSCH SEBASTIAN	Academic Staff, permanent	Dr. rer. nat.		1.00		8.0
07	HANKE DENNIS	Academic Staff, temporary	Dr. rer. nat.		1.00	1	4.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
07	FULDE MARCUS	Professor	Prof. Dr. med. vet.	1	1.00		6.8
07	GHAZISAEEDI FERESHTEH	Academic Staff, temporary	PhD	1	1.00	1	4.0
07	LÜBKE BECKER ANTINA	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
07	SCHWARZ STEFAN	Professor	Prof. Dr. med. vet.	1	1.00		9.0
07	JAHNEN JOHANNA	Academic Staff, temporary		1	0.50	1	2.0
07	KRÜGER HAKER HENRIKE	Academic Staff, temporary		1	0.35	1	1.4
07	KUPKE JOHANNES	Academic Staff, temporary		1	0.65	1	2.6
07	TEDIN KARSTEN	Academic Staff, permanent	PhD		1.00		8.0
07	VORST KIRA	Academic Staff, temporary	Dr. rer. nat.		1.00	1	4.0
08	LI TING TING	Academic Staff, temporary			1.00	1	4.0
08	BACHUS ANTONIA	Academic Staff, temporary		1	0.50	1	2.0
08	BEYER SARAH	Academic Staff, temporary		1	0.50	1	2.0
08	ALTER THOMAS	Professor	Prof. Dr. med. vet.	1	1.00		9.0
08	HERRFURTH DOREEN	Academic Staff, permanent	Dr. med. vet.	1	1.00		4.0
08	LANGKABEL NINA	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
08	MEEMKEN DIANA	Professor	Prof. Dr. med. vet.	1	1.00		7.0
08	GÖLZ GRETA	Academic Staff, permanent	Dr. rer. nat.		1.00		8.0
08	LANGFORTH SUSANN	Academic Staff, temporary	Dr. med. vet.	1	0.76	1	3.1
08	SCHÖNKNECHT ANTJE	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
08	SZOTT VANESSA	Academic Staff, temporary	PhD	1	1.00	1	4.0
10	CONRADI FABIAN	Academic Staff, temporary	PhD		1.00	1	4.0
10	FRIESE ANIKA	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
10	RÖSLER UWE	Professor	Prof. Dr. med. vet.	1	1.00		4.5
10	ROBÉ CAROLINE	Academic Staff, temporary	PhD	1	0.85	1	3.4
10	AMON THOMAS	Professor	Prof. Dr. agr.		1.00		2.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
11	KREHL KAROLINA	Academic Staff, permanent	Dr. med. vet.	1	1.00		0.0
11	THÖNE REINEKE CHRISTA	Professor	Prof. Dr. med. vet.	1	1.00		7.0
11	LEWEJOHANN LARS	Professor	Prof. Dr. rer. nat.		1.00	1	2.0
12	BARTENSCHLAGER FLORIAN	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
12	HAAKE ALEXANDER	Academic Staff, temporary		1	0.75	1	3.0
12	GRUBER ACHIM DIETER	Professor	Prof. Dr. med. vet.	1	1.00		9.0
12	KERSHAW OLIVIA	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
12	KLOPFLEISCH ROBERT	Professor	Prof. Dr. med. vet.	1	1.00		9.0
12	MUNDHENK LARS	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
12	LANDMANN KATHARINA	Academic Staff, temporary		1	0.75	1	3.0
12	LANGENHAGEN ALINA KATHARINA	Academic Staff, temporary		1	0.50	1	2.0
12	PUGET CHLOÉ	Academic Staff, temporary		1	0.75	1	3.0
12	REETZ ANNE ELISABETH	Academic Staff, temporary		1	0.50	1	2.0
12	VOSS ANNE	Academic Staff, temporary		1	0.75	1	3.0
12	GREENWOOD ALEX	Professor	Prof. Dr.		1.00		2.0
13	HELLINGA JACQUELINE	Academic Staff, temporary			1.00	1	4.0
13	VON SAMSON HIMMELSTJERNA GEORG	Professor	Prof. Dr. med. vet.	1	1.00		9.0
13	NIJHOF ARD	Professor	Prof. Dr.	1	1.00	1	9.0
13	SCHMIDT JENNIFER	Academic Staff, temporary		1	1.00	1	4.0
13	KRÜCKEN JÜRGEN	Academic Staff, permanent	PD Dr. rer. Nat.		1.00		8.0
13	TAJERI SHAHIN	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
14	PAULETTI ALBERTO	Academic Staff, temporary	PhD		1.00	1	4.0
14	BRÖER SONJA	Professor	Prof. Dr.	1	1.00	1	9.0
14	DALPONTE ANNE	Academic Staff, temporary		1	0.65	1	2.0
14	FILOR VIVIANE	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
14	BÄUMER WOLFGANG	Professor	Prof. Dr. med. vet.	1	1.00		8.5
14	VIDAK JONATHAN	Academic Staff, temporary		1	0.50	1	2.0
16	BARTEL ALEXANDER	Academic Staff, temporary			0.50	1	2.0
16	BELIK VITALY	Professor	Prof. Dr. rer. nat.		1.00	1	6.0
16	JENSEN CHARLOTTE	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
16	DOHERR MARCUS	Professor	Prof. Dr. med. vet.	1	1.00		9.0
16	MERLE ROSWITHA	Academic Staff, permanent	PD Dr. med. vet.	1	1.00		8.0
16	ZAMBRANO ZAMBRANO MARLLI ANDRE	Academic Staff, temporary			0.50	1	0.0
17	ADAM JASMIN	Academic Staff, temporary		1	0.75	1	3.0
17	BAUDISCH NATALIE	Academic Staff, temporary		1	0.75	1	3.0
17	BOLZ NICO MICHAEL	Academic Staff, temporary		1	0.75	1	3.0
17	GEHRKE RIEKE SOFIE	Academic Staff, temporary		1	0.75	1	3.0
17	GERNHARDT JENNIFER	Academic Staff, temporary		1	0.75	1	3.0
17	HAHN ALISA	Academic Staff, temporary		1	0.75	1	3.0
17	HAMMELSBACHER FRANZISKA	Academic Staff, temporary		1	0.75	1	3.0
17	HOFFMANN FRANZISKA	Academic Staff, temporary		1	0.75	1	3.0
17	KALINOVSKIY ANDREY	Academic Staff, temporary	Dr. med. vet.	1	0.75	1	3.0
17	KRAUL RONJA KATHARINA	Academic Staff, temporary		1	0.75	1	3.0
17	KUNZE KRISTINA	Academic Staff, temporary		1	0.75	1	3.0
17	GEHLEN HEIDRUN	Professor	Prof. Dr. med. vet.	1	1.00		9.0
17	HANDLER JOHANNES	Professor	Prof. Dr. med. vet.	1	1.00		9.0
17	LEELAMANKONG PITIPORN	Academic Staff, temporary	Dr. med. vet.	1	0.75	1	3.0
17	LIEBERTH SIMONA	Academic Staff, temporary		1	0.75	1	2.0
17	LISCHER CHRISTOPHORUS	Professor	Prof. Dr. med. vet.	1	1.00		9.0
17	MÄHLMANN KATHRIN	Academic Staff, temporary	Dr. med. vet.	1	0.75	1	2.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
17	MEISNER PAUL	Academic Staff, temporary		1	0.75	1	3.0
17	MÜLLER EVA	Academic Staff, temporary	Dr. med. vet.	1	0.75	1	3.0
17	MUSCI MARILENA	Academic Staff, temporary		1	0.75	1	3.0
17	NEBLING MARLENE	Academic Staff, temporary		1	0.75	1	3.0
17	RHEINFELD SVENJA	Academic Staff, temporary	Dr. med. vet.	1	0.90	1	3.8
17	RUTENBERG DUSTY	Academic Staff, temporary	Dr. med. vet.	1	0.75	1	2.0
17	SAHNOUNE LEONIE	Academic Staff, temporary		1	0.75	1	3.0
17	SCHATZ DAVINA	Academic Staff, temporary		1	0.75	1	3.0
17	SCHLOTE MARIE THERESE	Academic Staff, temporary		1	0.75	1	2.0
17	SCHLÜTER JESSICA	Academic Staff, temporary		1	0.75	1	3.0
17	SCHMITZ PHILIP	Academic Staff, temporary		1	0.75	1	3.0
17	STAS EMANUEL	Academic Staff, temporary		1	1.00	1	4.0
17	TALAMO LUCA	Academic Staff, temporary		1	0.75	1	3.0
17	WENSORRA MAREEN	Academic Staff, temporary		1	0.75	1	3.0
17	WITTENBERG JANA	Academic Staff, temporary		1	0.35	1	1.4
18	BORCHARDT STEFAN	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
18	CLAUSSEN RIEKE	Academic Staff, temporary		1	0.75	1	3.0
18	FESKE DANA	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
18	GROZEVA MARIYA	Academic Staff, temporary		1	1.00	1	4.0
18	HÖLPER MARVIN	Academic Staff, temporary		1	1.00	1	4.0
18	JÄGER ALEXANDRA	Academic Staff, temporary		1	1.00	1	4.0
18	MEIER KIM	Academic Staff, temporary		1	0.50	1	2.0
18	NIEHUES ANDREA	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
18	DRILLICH MARC	Professor	Prof. Dr. med. vet.	1	1.00		9.0
18	GROSSE REINHARD	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
18	HÖLTIG DORIS	Professor	Prof. Dr. med. vet.	1	1.00		9.0
18	SCHLEGEL LARISSA	Academic Staff, temporary		1	0.50	1	2.0
18	LÜSCHOW DÖRTE	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
18	MÜLLER KERSTIN ELISABETH	Professor	Prof. Dr. med. vet.	1	1.00		9.0
18	SONNTAG NOMI CHARLOTTE	Academic Staff, temporary		1	1.00	1	4.0
18	STOCK ANNEGRET	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
18	TIPPENHAUER CHRISTIE	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
18	VOLLAND MARINA	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	4.0
18	WILLE JAN PHILIPP	Academic Staff, temporary		1	0.75	1	3.0
18	ZACHERT FRANZISKA	Academic Staff, temporary		1	1.00	1	4.0
18	HILDEBRANDT THOMAS	Professor	Prof. Dr. med. vet.	1	1.00		2.0
19	EULE CORINNA	Professor	Prof. Dr. med. vet.	1	1.00		9.0
20	BEETZ SABINE	Academic Staff, temporary		1	0.75	1	3.0
20	CANBOLAT PASCAL MERIC	Academic Staff, temporary		1	0.75	1	3.0
20	FARKAS ANNA	Academic Staff, temporary		1	0.75	1	3.0
20	FEYER SINA	Academic Staff, temporary		1	0.75	1	3.0
20	GRATECAP LUCILE	Academic Staff, temporary		1	0.75	1	3.0
20	HARTMANN ALISA	Academic Staff, temporary		1	0.60	1	2.4
20	HELLMUTH VIKTORIA	Academic Staff, temporary		1	0.85	1	3.0
20	HERRMANN FELIX	Academic Staff, temporary		1	0.90	1	3.6
20	HUBER LISA	Academic Staff, temporary		1	0.75	1	3.0
20	HÜBNER SOPHIE	Academic Staff, temporary		1	0.75	1	3.0
20	JANOTTA JANA	Academic Staff, temporary		1	0.85	1	3.4
20	KRAMER VINCENZ	Academic Staff, temporary		1	0.75	1	3.0
20	LANGKAU LINA	Academic Staff, temporary		1	0.90	1	3.6

Scientific Institutions	Name	Position	Title	Veterinarian	FTE	Temporary	Teaching responsibility in hrs / week
20	LEUCHTNER SIMON	Academic Staff, temporary		1	1.00	1	4.0
20	NTELI KONSTANTIA	Academic Staff, temporary		1	0.75	1	3.0
20	RIEGE LISA	Academic Staff, temporary		1	1.00	1	4.0
20	SCHMIDT JANINA	Academic Staff, temporary		1	0.75	1	3.0
20	SCHÜLLER LISA	Academic Staff, temporary		1	0.85	1	3.4
20	BÖTTCHER PETER	Professor	Prof. Dr. med. vet.	1	1.00		9.0
20	STUHLMÜLLER JANA	Academic Staff, temporary		1	0.75	1	3.0
20	THIEME KATHARINA	Academic Staff, temporary	Dr. med. vet.	1	0.50	1	2.0
20	KOHN BARBARA	Professor	Prof. Dr. med. vet.	1	1.00		6.8
20	MÜLLER KERSTIN	Academic Staff, permanent	PD Dr. med. vet.	1	1.00		8.0
20	WEINGART CHRISTIANE	Academic Staff, permanent	Dr. med. vet.	1	1.00		8.0
FB	HOFER HERIBERT	Professor	Prof. Dr. rer. nat.		1.00		2.0
FB	BORCHERS KERSTIN	Academic Staff, permanent	PD Dr.		1.00		8.0
FB	SCHLESINGER SAMIRA	Academic Staff, temporary	Dr. med. vet.	1	1.00	1	2.0
Total				**149**	**155.16**	**129**	

B. Units of study of the core veterinary programme (including clinical rotations, EPT and graduation thesis)

Title, reference number, ECTS value, position in curriculum (year, semester), whether it is compulsory or elective, hours and modes of instruction, learning outcomes and their alignment with the ESEVT Day One Competences[1]

Freie Universität Berlin
Veterinary Medicine
ECTS Brochure 2023/2024

[1] As mentioned under Standard 3.2.1., each Day One Competece is matched to at least one learning outcome in our subject-specific learning objective catalogues: https://www.vetmed.fu-berlin.de/administration/intern/kataloge-broschueren/Gesamtkatalog_VetMed_Lernziele_Pruefungsthemen_Pruefungsinformationen_2023-11-30.pdf (VPN connection required)

1 Table of contents

2 The School of Veterinary Medicine introduces itself

Welcome to the School of Veterinary Medicine at Freie Universität Berlin. In this brochure you will find the prototypical course of study with the compulsory courses of the Veterinary Medicine degree programme as well as an ECTS classification of these courses.

2.1 Important addresses at the School of Veterinary Medicine

Coordinator for International Relations, Partnerships (Erasmus, Sokrates) and Visiting Students
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14163 Berlin
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a.kosmol@fu-berlin.de

2.2 Clinics and Institutions

Further information about the department and an introduction to the scientific institutions as well as their contact persons can be found on our website at the following URL: http://www.vetmed.fu-berlin.de

2.2.1 Veterinary Hospital Freie Universität Berlin

Equine Clinic: Surgery and Radiology (WE17)

Oertzenweg 19b
14163 Berlin-Duppel

Phone: +49 (0)30 838-62300

pferdeklinik@vetmed.fu-berlin.de

Farm Animal Clinic - Division for Poultry (WE18)

Königsweg 63
14163 Berlin-Duppel

Phone: +49 (0)30 838-62310

gefluegelkrankheiten@vetmed.fu-berlin.de

Farm Animal Clinic - Divison for Ruminants and Camelids (WE18)
Farm Animal Clinic - Divison for Pigs (WE18)

Königsweg 65
14163 Berlin-Duppel

Phone: +49 (0)30 838-62261

klauentierklinik@vetmed.fu-berlin.de

Centre for Veterinary Clinical Services

Königsweg 65
14163 Berlin-Duppel

Phone: +49 (0)30 838-62618

fortpflanzungsklinik@vetmed.fu-berlin.de

Small Animal Clinic (WE20)

Oertzenweg 19b
14163 Berlin-Duppel

Phone: +49 (0)30 838-62356

kleintierklinik@vetmed.fu-berlin.de

2.2.2 Institutes

Institute of Veterinary Anatomy (WE01)

Koserstraße 20
14195 Berlin-Dahlem

Tel.: +49 (0)30 838 – 53555

anatomie@vetmed.fu-berlin.de

Institute of Veterinary Physiology (WE02)

Oertzenweg 19b
14163 Berlin-Duppel

Tel.: +49 (0)30 838-62600

physiologie@vetmed.fu-berlin.de

Institute of Veterinary Biochemistry (WE03)

Oertzenweg 19b
14163 Berlin-Duppel

Tel.: +49 (0)30 838-62225

biochemie@vetmed.fu-berlin.de

Institute of Animal Nutrition (WE04)

Königin-Luise-Str. 49
14195 Berlin-Dahlem

Phone: +49 (0)30 838-52256

tierernaehrung@vetmed.fu-berlin.de

Institute of Virology (WE05)

R.-v.-Ostertag-Str. 7-13
14163 Berlin-Duppel

Phone: +49 (0)30 838-51833

virologie@vetmed.fu-berlin.de

Institute of Immunology (WE06)

R.-v.-Ostertag-Str. 7-13
14163 Berlin-Duppel

Phone: +49 (0)30 838-51824

imb@vetmed.fu-berlin.de

Institute of Microbiology and Epizootics (WE07)

R.-v.-Ostertag-Str. 7-13
14163 Berlin-Düppel

Tel.: +49 (0)30 838-51840

imt@zedat.fu-berlin.de

Institute of Food Safety and Food Hygiene (WE08)

Königsweg 69
14163 Berlin-Duppel

Phone: +49 (0)30 838-62550

lebensmittelhygiene@vetmed.fu-berlin.de

Institute for Animal Hygiene and Environmental Health (WE 10)

R.-v.-Ostertag-Str. 7-13
14163 Berlin-Düppel

Tel.: +49 (0)30 838-51845

tierhygiene@vetmed.fu-berlin.de

Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science (WE11)

Königsweg 67, Building 21, 1st
OG14163 Berlin

Phone: +49 (0)30 838-56034

tierschutz@vetmed.fu-berlin.de

Institute of Animal Pathology (WE12)

R.-v.-Ostertag-Str. 15
14163 Berlin-Duppel

Phone: +49 (0)30 838-62450

pathologie@vetmed.fu-berlin.de

Institute of Parasitology and Tropical Veterinary Medicine (WE13)

R.-v.-Ostertag-Str. 7-13
14163 Berlin-Duppel

Phone: +49 (0)30 838 62310

parasitologie@vetmed.fu-berlin.de

Institute of Pharmacology and Toxicology (WE14)

Koserstraße 20
14195 Berlin-Dahlem

Phone: +49 (0)30 838-53214

pharmakologie@vetmed.fu-berlin.de

Institute of Veterinary Epidemiology and Biostatistics (WE15)

Königsweg 67, Building 21, 1st
OG14163 Berlin

Phone: +49 30 838 71714

marcus.doherr@fu-berlin.de

3 Information about the courses

3.1 Formal framework: Course of studies according to the Veterinary Licensing Ordinance

The degree programme in Veterinary Medicine in Germany is organized by the state. This means that the framework conditions are not regulated by the universities, but according to the requirements of the "Veterinary Licensing Ordinance" on a nationwide basis. This applies not only to the content, but also to the examinations, which are not organized by the university, but by a higher-level body. In Berlin, the "State Office for Health and Social Affairs" (LAGeSo) is responsible for this.

The TappV and other legal bases can be found at: https://www.vetmed.fu-berlin.de/studium/veterinaermedizin/gesetze-ordnungen/index.html

The requirements of the TappV are implemented at the university for the course of study in a study regulation. These study regulations determine, among other things, which compulsory courses are offered in the individual semesters. At this planning level, the courses are described in this brochure.

The subsequent course planning is very concrete. In the course planning, it is planned for each semester exactly when each course will take place, in which room and by which lecturers. A list of the specific courses held in a semester with the corresponding times, locations and contact persons can be found in the course catalogue of the FU Berlin at: http://www.fu-berlin.de/vv

For each semester, timetables are published well in advance of the start of the courses, in which the weekly lectures, exercises and seminars as well as the venues are broken down. These are also available online at www.vetmed.fu-berlin.de. Further optional courses can be found in the online course catalogue of Freie Universität Berlin at: https://www.vetmed.fu-berlin.de/studium/veterinaermedizin/stundenplaene/index.html

3.2 Courses for planning your exchange

3.2.1 "Compulsory Events"

For a better overview for planning your exchange, you will find a compilation of the compulsory courses of the current year in Appendix 1, divided by semester. In addition to the descriptions of the content of the courses and the type of performance assessment, you will find the ECTS credits with which these courses can be credited.

Please note that the courses of the 1st, 3rd, 5th, 7th and 9th semesters take place in the winter semester and the courses of the 2nd, 4th, 6th, 8th and 10th semesters take place in the summer semester.

3.2.2 "Final clinical rotation"

The "Final clinical rotation" is the most important part of the practical-clinical training. This includes 9 consecutive weeks in one of the three clinics of the School. Students must opt for a focus rotation; farm animals, horses or small animals. The rotation groups are fixed in advance and cannot be freely chosen. The rotations are wholly or partially within the lecture period. For your planning, this means that you can complete either a clinical rotation OR other courses in one semester. It is generally not possible to successfully attend courses from the 1st to 8th semester and a rotation in one semester. You will be offered a complete final rotation, but a clinic of your choice cannot be guaranteed in every case. If you wish to attend the final clinical rotation during your stay, it must be checked in advance in which focus rotation places are available. The ERASMUS representative at our School must be involved in the planning at an early stage.

3.2.3 "Elective Courses"

In addition to the compulsory courses, the School offers a variety of other courses that allow students to deepen their knowledge of a specific topic. The elective courses are advertised anew every semester, so that these courses are only fixed

for the current (and possibly future) semester. These courses are published exclusively in the course catalogue. The courses are generally counted with one ECTS credit. Regular attendance is compulsory.

4 Examinations and performance assessments

4.1 Examinations

The examinations for students of the Veterinary Medicine degree programme are "state examinations". These exams are not organized by the university, but by an external authority. Incoming students within the framework of the ERASMUS exchange can therefore not take part in the official examinations. Examinations are determined for them in the form of final module examinations. To do this, it is necessary to clearly define all the exams you want to take at the beginning of the exchange. The procedure is as follows:

(i) Your Learning Agreement should specify which modules require an examination.
(ii) Review your LA with the ERASMUS coordinator regarding the feasibility of the examinations you have planned.
(iii) Details must be agreed with the responsible lecturers (types of examinations, grades and dates) at the beginning of the semester.

The awarding of grades for courses that are otherwise not graded at the FU is only provided in exceptional cases. **Please note that performance reviews cannot be carried out if they have not been coordinated in advance.**

4.2 Course-related performance assessments

In addition to the examinations, performance assessments are sometimes carried out at the course level. The event types "seminars" and "exercises" require regular and successful participation. In some cases, success of participation is assessed with attestations or report writing. These assessments are generally ungraded. **If deviating certificates of achievement are required, these must also be agreed in advance with the ERASMUS coordinator and the responsible lecturers. As for exams, the offering of assessments that are not laid out in the regular study regulations is completely at the discretion of the certifying lecturer.**

For the course type "lectures", neither regular attendance is checked nor is performance assessment required at the course level. The content review takes place via examinations at the module level. **Because Freie Universität Berlin does not perform attendance checks in lectures, it is generally not possible to receive documents certifying regular attendance in lectures.**

In summary, the types of attendance certificates and grades that may be provided to foreign students are legally fixed in the study and examination regulations. Other certificates and grades may be provided only in rare, well justified and exceptional circumstances and are completely at the discretion of the course coordinator. Requests for certificates or grades must be agreed upon in the Learning Agreement at the beginning of the semester. As the provision of grades that are not fixed in the study and examination regulations can mostly not be expected, students are strongly advised to obtain those grades at their home university. To facilitate the latter, the Coordinator for International Relations, Partnerships and Visiting Students will support you in sitting remote exams with your home university during your stay at Freie Universität Berlin.

4.3 Performance evaluation (grading scale)

The usual performance assessment at the Faculty of Veterinary Medicine is based on § 14 TAppV and consists of a scale of five grades with verbal definitions. The following exam grades are used for the evaluation of performance in oral and written examinations:

Grade Level	Definition	Description
1	"very good"	an excellent performance
2	"Good"	performance that is significantly higher than average requirements
3	"satisfactory"	a performance that meets average requirements in all respects
4	"adequate"	a performance that, despite its shortcomings, still meets the requirements
5	"Not sufficient"	a service that no longer meets the requirements due to significant defects.

For students in ECTS, this grading system is "translated" into the ECTS grading scale, which has 6 levels with the criteria described below.

Grade Level	Grade span	Definition	Definition	Description
A	1,0 – 1,5	excellent	excellent	an outstanding achievement
B	1,6 – 2,0	Very good	very good	a performance above average with some slight flaws
C	2,1 – 3,0	good	Good	a generally solid performance with some major flaws
D	3,1 – 3,5	satisfying	satisfactory	Mediocre performance with conspicuous bugs
E	3,6 – 4,0	sufficient	sufficient	Performance meets the minimum requirements
F	4,1 – 5,0	failed	Fail	Performance below minimum requirements

4.4 State examinations as part of the degree programme

The following state examinations are offered at Freie Universität, but Erasmus incoming students do not formally participate. If you would like to take some of these exams, please clarify this in advance with the ERASMUS coordinator.

5 List of Examination Subjects

Title of the exam	Type and time of the examination or study-related assessment	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of the exam
A. Preliminary veterinary examination			
Natural Science Section of the Veterinary Preliminary Examination (Pre-Physicum) § 19 TAppV			
Physics incl. Fundamentals of Physical Radiation Protection § 19 No. 1 TAppV	Examination during the lecture-free period at the end of the 2nd semesters	Oral exam (100%) or alternatively written or electronic exam (100%)	§ 21 TAppV
Chemistry § 19 No. 2 TAppV	Examination during the lecture-free period at the end of the 2nd semesters	Exam (written or electronic) (100%)	§ 21 TAppV
Zoology § 19 No. 3 TAppV	Examination during the lecture-free period at the end of the 2nd semesters	Oral exam (100%) or alternatively written or electronic exam (100%)	§ 21 TAppV
Botany of Forage, Poisonous and Medicinal Plants § 19 No. 4 TAppV	Examination during the lecture-free period at the end of the 2nd semesters	Exam (written or electronic) (100%)	§ 21 TAppV
Anatomical-physiological section of the preliminary veterinary examination (Physicum) § 22 TAppV			
Biochemistry § 22 No. 4 TAppV	Examination during the lecture-free period at the end of the 3rd semesters	Oral exam (100%)	§ 27 TAppV
Animal Breeding and Genetics Including Animal Assessment § 22 No. 5 TAppV	Examination during the lecture-free period at the end of the 3rd semesters	Exam (written or electronic) (100%)	§ 28 TAppV
Anatomy § 22 No. 1 TAppV	Examination during the lecture-free period at the end of the 4th semesters	Oral exam with practical parts (100%)	§ 24 TAppV
Histology and Embryology § 22 No. 2 TAppV	Examination during the lecture-free period at the end of the 4th semesters	Exam (written or electronic) (100%)	§ 25 TAppV
Physiology § 22 No. 3 TAppV	Examination during the lecture-free period at the end of the 4th semesters	Oral exam with practical parts (100%)	§ 26 TAppV

Title of the exam	Type and time of the examination or study-related assessment	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of the exam
B. Veterinary examination			
Animal Husbandry and Animal Hygiene § 29 No. 1 TAppV	Examination during the lecture-free period at the end of the 5th smesters	Exam and first repeat exam: written or electronic exam (100%)	§ 32 TAppV
Animal Welfare and Ethology § 29 No. 2 TAppV	Examination during the lecture-free period at the end of the 5th semesters	Exam (written or electronic) (100%)	§ 33 TAppV
Animal Nutrition § 29 No. 3 TAppV	Examination during the lecture-free period at the end of the 5th semesters	Oral exam with practical exercises (100%)	§ 34 TAppV
Clinical Propaedeutics § 29 No. 4 TAppV	Examination during the lecture-free period at the end of the 5th semesters	Oral exam with practical exercises (100%)	§ 35 TAppV
Virology § 29 No. 5 TAppV	Examination during the lecture-free period at the end of the 6th semesters	Oral exam (100%)	§ 36 TAppV
Bacteriology and Mycology § 29 No. 6 TAppV	2 parts as follows:		§ 37 TAppV
1 Microbiology Course	Course-related assessment during the 6th semester	Practical exercise with written protocol (20%)	
2 Bacteriology and Mycology	Examination during the lecture-free period at the end of the 6th semesters	Exam (written or electronic) (80%)	
Parasitology § 29 No. 7 TAppV	Examination during the lecture-free period at the end of the 6th semesters	Oral exam with practical exercises (100%)	§ 38 TAppV
Pharmacology and Toxicology § 29 No. 9 TAppV	Examination during the lecture-free period at the end of the 6th semesters	Oral exam (100%)	§ 40 TAppV

Title of the exam			Type and time of the examination or study-related assessment	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of the exam
B. Veterinary examination					
Drug and Narcotics Legislation § 29 No. 10 TAppV			2 parts as follows:		§ 41 TAppV
	1	Galenics and Prescription	Course-related performance assessments during the 7th semester	Practical exercise with written or electronic content (40%)	
	2	Drug and Narcotics Legislation	Examination during the lecture-free period at the end of the 7th semesters	Oral exam (60%)	
Radiology § 29 No. 12 TAppV			Examination during the lecture-free period at the end of the 7th semesters	Oral exam with practical exercises/OSCE (100%)	§ 43 TAppV
Animal Epizootic Control and Infection Epidemiology § 29 No. 8 TAppV			Examination during the lecture-free period at the end of the 8th semesters	Oral exam (100%)	§ 39 TAppV
General Pathology and Special Pathological Anatomy and Histology § 29 No. 13 TAppV			3 parts as follows:		§ 44 TAppV
	1	General pathology	Study-related performance assessment during the lecture-free period at the end of the 8th semester	Exam (written or electronic) (25%)	
	2	Special Pathology	Study-related performance assessment during the lecture-free period at the end of the 8th semester	Exam (written or electronic) (35%)	
	3	General Pathology and Special Pathological Anatomy and Histology	Examination in the 9th/10th semester, during the final clinical rotation	Oral and practical exam (40%)	
Poultry diseases § 29 No. 11 TAppV			Final exam during the 11th semester	Oral exam (100%)	§ 42 TAppV
Food Science Including Food Hygiene § 29 No. 14 TAppV			Final exam during the 11th semester	Oral exam with practical exercises (100%)	§ 45 TAppV
Meat Hygiene § 29 No. 15 TAppV			2 parts as follows:		§ 46 TAppV
	1	General and special meat hygiene	Study-related performance assessment at the end of the course 8th semesters	Exam (written or electronic) (40%)	
	2	Fleischhygiene	Final exam during the 11th semester	Oral exam with practical exercises (60%)	

Title of the exam			Type and time of the examination or study-related assessment	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of the exam
B. Veterinary examination					
Dairy Science § 29 No. 16 TAppV			2 parts as follows:		§ 47 TAppV
	1	Milk Test Report	Course-related performance assessment during the 7th semester	Practical exercise with written protocol (30%)	
	2	Dairy Science	Final exam during the 11th semester	Exam (written or electronic) (70%)	
Reproductive Medicine § 29 No. 17 TAppV			Final exam during the 11th semester	Oral exam with practical exercises (100%)	§ 48 TAppV
Internal Medicine § 29 No. 18 TAppV			2 parts as follows:		§ 49 TAppV
	1	Internal Medicine, Dermatology and Laboratory Diagnostics (cross-species exam)	Study-related performance assessment during the lecture-free period at the end of the 8th semester	Exam (written or electronic) (40%)	
	2	Internal Medicine	Final exam during the 11th semester	Oral exam with practical exercises (60%)	
Surgery and Anaesthesiology § 29 No. 19 TAppV			2 parts as follows:		§ 50 TAppV
	1	General and Special Surgery, Anaesthesiology and Ophthalmology (cross-species exam)	Study-related performance assessment during the lecture-free period at the end of the 8th semester	Exam (written or electronic) (40%)	
	2	Surgery and Anesthesiology	Final exam during the 11th semester	Oral exam with practical exercises (60%)	
Judicial Veterinary Medicine, Professional Law and Professional Code § 29 No. 20 TAppV			Final exam during the 11th semester	Exam (written or electronic) (100%)	§ 51 TAppV

6 Courses in WS 2023/24 and SoSe 2024

6.1 Pre-clinical studies

6.1.1 Courses of the 1st Year

Physics (V)					
Course No.	20007301		Semester	1	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	The lecture focuses on elements of atomic and nuclear physics related to radiology (fundamental ideas of quantum mechanics, Bohr's atomic model, nuclear model, radioactive decay, steel protection). The basics of mechanics, electricity, wave theory and optics necessary for the understanding of atomic and nuclear physics are discussed in the first half of the lecture.				
Institutions	WE02				

Physical Exercises					
Course No.	20007330		Semester	1	
Format	Exercise		ECTS-Credits	4,0	SWS 2,0
Course contents	In the practical exercises, the methods of experimental work are introduced. For this purpose, experimental tasks from the fields of mechanics, electricity, optics, atomic and nuclear physics are processed, recorded, evaluated and compared with theoretical assumptions.				
Institutions	WE02				

Chemistry					
Course No.	21791b		Semester	1	
Format	Lectures		ECTS-Credits	4,0	SWS 4,0
Course contents	Chemical reactions, stoichiometry, quantity of substances: moles, structure of atoms, interaction of light/matter, periodic table, properties of matter, noble gases, states of matter, equation of state of the ideal gas, isotopes, atomic bond H_2 molecule, oxidation and reduction, halogens, electronegativities, hydrogen halogens, polar atomic bond, hydrogen bond, chem. equilibrium, law of mass, reaction rate, half-life, 1st order reaction, energetics chem. reactions, Gibbs-Helmholtz equation, energy profile, activation energy, closed, closed and open systems, alkali metals, metallic bonding, ionic bonding, ion lattices, alkali halides, chalcogens, O_2 molecule, ozone, orbital hybridization, geometry of polyatomic molecules, *- and *-bonds, mesomerism, properties and structure of water, self-dissociation, pH, acids and bases (Brønstedt), neutralization, indicators, weak acids and bases, pkA, pkB, degree of dissociation *, buffer, buffer capacity; Potentials, Nernst's equation, pH-dependent potentials, pH measurement with the glass electrode, diffusion and membrane potentials, sulfur and Compounds, coupled equilibria, solubility product, heterogeneous phase equilibria, essential trace elements, toxicity & concentration, alkaline earth metals, formation & decay constants of complexes, chelated complexes, toughness, coordination number (boron & aluminum), nitrogen group, ammonia, hydrazine, hydroxylamine, nitrogen oxides, nitric and nitric acid, phosphoric acid, apatites, multi-stage dissociation, condensation of phosphoric acid, phosphate buffer; carbon group, carbon dioxide, hydrogen carbonate & carbonate, urea, phosgene, hydrogen cyanide & salts; Overview of Si compounds, important subgroup elements (Fe, Cu, Co, Mo, etc.).				
Institutions	WE03				

Zoology					
Course No.	23760a		Semester	1	
Format	Lectures		ECTS-Credits	4,0	SWS 4,0
Course contents	- construction of the animal cell; - Functional relationships (excretion, contractile and motile elements; - cytoskeleton, extracellular matrix); reproduction, generational renewal and development; basic phenomena of genetics (molecular genetics, developmental genetics); - Introduction to phylogenetic systematics; - Presentation of the most important taxa of the animal kingdom; - Comparative Animal Physiology incl. Neurobiology and Behavioral Biology.				
Institutions	WE13				

General Botany					
Course No.	23760b		Semester	1	
Format	Lectures		ECTS-Credits	4,0	SWS 2,0
Course contents	The lecture presents the main lines of the plant kingdom with their respective characteristics and discusses the basic principles of plant life forms in the context of their evolution. (1) The three kingdoms of living things, evolutionary lines of prokaryotes with aerobic photosynthesis. Evolutionary lines of photosynthetic eukaryotes, endosymbiont theory (2) Sexual reproduction in plants, alternation of generations, overview of the polyphyletic group of algae (Part 1: Heterokontophyta, Dinophyta, Cryptophyta, Euglenophyta) (3) Overview of the polyphyletic group of algae (Part 2: Glaucobionta, Rhodobionta, Chlorobionta), overview of the Mycobionta as plastid-less, heterotrophic organisms (especially slime, ascomyceous and stander fungi), overview of lichens as a symbiosis between fungi and algae (4) Landfall of plants, overview of the polyphyletic group of algae (Part 3: algae-shaped representatives of the Streptophyta), overview of the evolutionary line of mosses (hornworts, liverworts, broadleaf mosses), overview of the lycophytes and monilophytes (Part 1: club moss, moss ferns, horsetails) (5) Overview of the lycophytes and monilophytes (Part 2: Ferns), characteristics of seed plants, overview of the gymnosperms (Part 1: Cycadopsida, Ginkgopsida, Coniferopsida) (6) Overview of the gymnosperms (Part 2: Gnetopsida), reproductive morphology of flowering plants, overview of the angiosperms (basal angiosperms, monocotyledons, eudicots), diversity of selected groups of monocots and eudicots.				
Institutions	WE04				

Medical terminology					
Course No.	08069		Semester	1	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Latin and Greek phonetics and words, application in scientific and medical language, structure of the noun anatomica, including related nomenclatures				
Institutions	WE01				

Anatomy I					
Course No.	08050		Semester	1	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Construction of basic anatomical knowledge in the form of general osteology, myology, arthrology, angiology, lymphology, neurology as well as the general structure of skin, mucous membranes and serous membranes. - Knowledge of the basic concept of structures and organ systems (e.g. musculoskeletal, respiratory, digestive, urinary and reproductive systems) in carnivores (dogs, cats) in				

	close connection with the circulatory and nervous systems as well as the lymphatic and endocrine systems. - Ability to link topographic and systematic anatomy; interdisciplinary links (histology, zoology). - Practical relevance through constant linking of applied anatomical aspects with clinically relevant topics with regard to the clinical part of the course (surgery, imaging diagnostics: X-ray, ultrasound, MRI, CT). - Understanding of comparative anatomy using the example of variations of the basic blueprint of the animal's body between dog and cat. - Preparation for the subsequent, thematically coupled practical lessons.
Institutions	WE01

Anatomical Dissection Course I (Dog and Cat)					
Course No.	08052		Semester	1	
Format	Exercise		ECTS-Credits	6,0	SWS 4,0
Course contents	- Systematically guided topographical preparation of the structures and organ systems on fixed and unfixed animal bodies (dog and cat comparative). - Deepening of specialist knowledge, development of rhetorical skills and intensification of professional communication between students through the new didactic method "peer instructing". "Peer instructing" (peer = to instruct = to instruct) is based on the teaching by students accompanied and supported by the lecturers. - Learning the topographic preparation method as preparation for later clinical-surgical work. Linking topographic and systematic anatomy; interdisciplinary links (histology, zoology). - Independent preparation of the body cavities on unfixed animal carcasses (dog and cat) and comparison of the different anatomical structures of carnivores on unfixed carcasses, as well as on organ and skeletal preparations or plastinates and polyethylene glycol (PEG) preparations. - Mesoscopic demonstrations (dissecting magnifying glass). - Learning anatomical terminology. - Clinical relevance by learning how to interpret imaging techniques: Comparison of the anatomical specimens created or provided by the patient with X-ray images presented on specific topics as well as CT and ultrasound images. - Guidance for the assessment of clinically applied questions.				
Institutions	WE01				

General and Special Histology I					
Course No.	08060		Semester	1	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Ultrastructure of the animal cell, structure of tissues as well as microscopic anatomy of the skin and immune system of domestic mammals and birds with functional reference. Establishing references to clinical situations or cases and integrating the various fields of knowledge.				
Institutions	WE01				

General and Special Histology Course I					
Course No.	08062		Semester	1	
Format	Exercise		ECTS-Credits	4,0	SWS 2,0
Course contents	Handling of the microscope and independent microscopic diagnosis of all types of tissues (bone tissue, including development), as well as blood vessels, blood cells and organs of the lymphatic system of domestic mammals and poultry. Deepening of knowledge especially for the histological-microscopic diagnostics of the respective course preparations.				

	Basic knowledge of the preparation of preparations for light and electron microscopy, basic knowledge of light microscopy, routine histological staining, immunohistochemistry and electron microscopy. Basic knowledge in the differentiation of physiological and pathologically altered tissue. Maximization of professional competence through peer instructing (= teaching by students accompanied and supported by the lecturers).
Institutions	WE01

History of Veterinary Medicine

Course No.	08912		Semester	1	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	At the beginning of the veterinary studies, students should be given an insight into the development of veterinary medicine and the history of the profession. Among other things, the relationship between humans and animals from prehistory to the present day is depicted.				
Institutions	WE17				

Introduction to the Veterinary Profession

Course No.	08850		Semester	1	
Format	Lectures		ECTS-Credits	2,0	SWS 1,0
Course contents	As part of the event, students will gain first insights into the diversity of veterinary practice and the associated career opportunities. Students will have the opportunity to ask questions about the study of veterinary medicine. The possibilities for choosing training within the framework of the compulsory internships are presented. Practitioners, official veterinarians, scientists, veterinarians working in the pharmaceutical industry and professional representatives describe their everyday work with the associated highlights, but also the obstacles. Questions and contributions to the discussion are expressly encouraged.				
Institutions	WE18				

Cross-sectional teaching: Module Learning Strategies and Time Management

Course No.	08770		Semester	1	
Format	Seminars		ECTS-Credits	1,0	SWS 1,0
Course contents	In this course, learning strategies are learned and applied, as well as methods for time management.				
Institutions	WE01				

Chemistry Exercises

Course No.	21791a		Semester	2	
Format	Exercise		ECTS-Credits	5,0	SWS 3,5
Course contents	Practical exercises on selected topics of the lecture				
Institutions	WE03				

Botany of Forage, Poisonous and Medicinal Plants

Course No.	08205		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	The aim of the event is for you to: 1. know basic methods for cultivating fodder plants, 2. be able to name the most important fodder plants, 3. know the essential properties, 4. learn how to harvest, preserve, store and process forage crops, 5. master the basic definitions of medicinal herbalism, 6. be able to recognize/name/designate important medicinal and poisonous plants and				

	7. know and be able to assess their ingredients or pharmacological/toxicological effects. Teaching units: 1. Introduction, basics of the cultivation of fodder plants 2. Permanent grassland, green cuttings 3. Management and influence on feed value 4. Forage cultivation 5. Specificities of crops used as animal feed 6. Introduction to medicinal herbology 7. Botany of medicinal plants 8. Botany of medicinal plants (excursion) 9. Introduction to poisonous plants 10. Botany of poisonous plants
Institutions	WE04

Situs I (Anatomy)					
Course No.	08054		Semester	2	
Format	Exercise		ECTS-Credits	3,0	SWS 1,5
Course contents	Seminar on Body Cavities and Viscera I (Situs I); Topographic and clinical anatomy as well as imaging techniques of dogs and cats				
Institutions	WE01				

Biochemistry I					
Course No.	08150		Semester	2	
Format	Lectures		ECTS-Credits	4,0	SWS 4,0
Course contents	The Basic Concept of the Lecture Biochemistry I -Introduction - Amino acids, proteins and N-metabolism - Coenzymes/vitamins and enzymes - Carbohydrates and their metabolism - Lipids, membrane formation and lipid metabolism - Biological oxidation (citrate cycle, respiratory chain) A detailed compilation of the lecture contents, including a catalogue of topics, can be found on Blackboard.				
Institutions	WE03				

Seminar for the Biochemistry Practical Course					
Course No.	08152		Semester	2	
Format	Seminars		ECTS-Credits	2,0	SWS 0,5
Course contents	A total of 4 attestations are to be completed within the framework of this seminar on the following topics in order to deepen specialist knowledge: Amino acids Proteins Enzymes Carbohydrates carbohydrate metabolism, Vitamins Lipids Lipid metabolism.				
Institutions	WE03				

Agriculture					
Course No.	08210		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	Influencing factors and purpose in livestock farming; animal husbandry, animal performance, animal health; animal-environment interaction; farm structures with livestock farming; intensive and extensive livestock farming; requirements for animal husbandry systems; animal husbandry and animal welfare; animal husbandry and environmental protection; livestock in the agroecosystem; evaluation of animal husbandry systems; evaluation criteria for animal-friendly and environmentally sound animal husbandry; principles of barn construction; housing arrangements for dairy cows; combinations of husbandry, feeding, milking, manure removal; variants of housing for growing cattle; grazing practices; housing arrangements for pigs at all levels of husbandry; Influences of husbandry and feeding practices on the health and growth of pigs, as well as the quality of the meat; opportunities and conditions for sheep farming; poultry farming; Animal husbandry in organic farming.				
Institutions	WE04				

Animal Breeding and Genetics Incl. Animal Assessment					
Course No.	08215		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	Course contents: - Structure and function of the genetic make-up - Importance of mutations - Laws of heredity - Molecular genetic methods in animal breeding - Population genetic basis - Breeding methodology (elements of breeding programs)				
Institutions	WE11				

Special Animal Breeding and Genetics Incl. Animal Assessment					
Course No.	08216		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Development of animal populations, services, consumption of animal products - Breeding programs (breeding goal, performance tests, selection, breeding progress) for important livestock breeds of cattle, pigs, horses, sheep and chickens - Current aspects of animal breeding				
Institutions	WE11				

Exercises in Animal Breeding and Genetics Incl. Animal Assessment					
Course No.	08217		Semester	2	
Format	Exercise		ECTS-Credits	2,0	SWS 1,0
Course contents	Cattle: breeds; direction of performance and employment prospects, assessment of breeding animals, assessment of carcasses and quality production, practical breeding work. Horses: Organization of the performance test Pigs: breeding value estimation, breeding methods, assessment of pigs breeds and breeding animals, assessment of carcass quality. Sheep and goats: breeds of sheep, breeds of goats, breeding programmes for unfavourable population structures.				
Institutions	WE11				

Physiology I					
Course No.	08100		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	In this first part of the physiology lectures, basic contents of cell physiology, neuronal and neuromuscular excitability as well as sensory and vegetative functions are taught.				
Institutions	WE02				

Introduction to Behavioral Biology					
Course No.	08550		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Fundamentals and Objectives of Behavioral Science - Emergence of behavior and behavioral patterns - Methods of behavioral observation - Specific behaviors such as dogs, cats, pets, laboratory rodents, fish, frogs and reptiles, cattle, pigs, horses, poultry, sheep and goats, zoo and wild animals				
Institutions	WE11				

Introduction to Animal Welfare Ethics and Law					
Course No.	08551		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Fundamentals of Animal Welfare Law (Animal Protection Act, Animal Protection Ordinance, Animal Protection Ordinance, Animal Protection Ordinance, Regulation 1/2005 (EC), Animal Protection Ordinance, Directive 63/2010 EU, Animal Protection Ordinance) - Mammal appraisal - Circus Guidelines - Veterinary Ethics - Aspects of animal welfare in the keeping of cattle, pigs, pets and pets - Aspects of animal welfare at slaughter - Aspects of animal welfare in zoo animal husbandry and the display of animals - Ethical considerations and aspects of animal welfare in animal research				
Institutions	WE11				

Biomedical Statistics					
Course No.	08780		Semester	2	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	In this introductory lecture on biometrics, the basic concepts and methods of population medicine (epidemiology), data collection and data evaluation (statistics) are presented using illustrative examples. In particular, the following topics will be addressed: (1) definitions and areas of application of epidemiology and statistics; (2) data formats and descriptions; (3) measures of disease incidence and association; (4) Characteristics and areas of application of diagnostic test procedures, (5) probability distributions (binomial, normal) and calculating with probabilities, (6) descriptive statistics; (7) formulating and testing statistical hypotheses, and (8) Simple statistical test procedures.				
Institutions	WE16				

Cross-sectional Focus on Communication					
Course No.	08083		Semester	2	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	This course teaches the basics of communication.				
Institutions	WE01				

6.1.2 Courses of the 2nd Year

Anatomy II					
Course No.	08051		Semester	3	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Knowledge of the basic concept of structures and organ systems (e.g. musculoskeletal, respiratory, digestive, urinary and reproductive systems) in large and small ruminants, horses and pigs in close connection with the circulatory and nervous systems as well as the lymphatic and endocrine systems. - Ability to link topographic and systematic anatomy; interdisciplinary links (microscopic anatomy, propaedeutics, physiology). - Theoretical underpinning of the rectal examination procedure; Construction of anatomical foundations for clinical questions. - Practical relevance through constant linking of applied anatomical aspects with clinically relevant topics with regard to the clinical part of the course (clinic, surgery, imaging diagnostics, pathology). - Deepening the understanding of comparative anatomy, taking into account the variations in the basic blueprint of the carcass in herbivores and omnivores. - Preparation for the subsequent, thematically coupled practical lessons.				
Institutions	WE01				

Anatomy class II (Ungulates)					
Course No.	08053		Semester	3	
Format	Exercise		ECTS-Credits	8,0	SWS 4,0
Course contents	- Systematically guided topographic preparation of the structures and organ systems on fixed and unfixed animal carcasses (horse, cattle, sheep, goats, pigs). - Deepening of specialist knowledge, development of rhetorical skills and intensification of professional communication between students through the new didactic method 'peer instructing' (peer = eng. The equal, the peer, to instruct = English to educate, instruct) based on the teaching by students accompanied and supported by the lecturers. - Learning the topographic preparation method as preparation for later clinical-surgical work, with a focus on stratigraphy, orientation on the basis of palpable bone points and muscle furrows, positional relationships and organ projection on the animal's body as well as conduction structures to be gentle. - Ability to independently carry out the preparation demonstrated on the demonstration species on the other species and to work out differences. - Linking topographic and systematic anatomy; interdisciplinary links (microscopic anatomy, propaedeutics, physiology). - Independent preparation of the body cavities on fixed animal carcasses (horses, cattle, small ruminants) and comparison of the different anatomical structures on unfixed carcasses (cattle, small ruminants, pigs), as well as on organ and skeletal preparations or plastinates and polyethylene glycol (PEG) preparations. Mesoscopic demonstrations (dissecting magnifying glass). - Practical application and transfer of medical terminology and anatomical terminology. - Clinically applied anatomy by orienting palpation on live animals. - Guidance for the assessment of clinically applied questions.				
Institutions	WE01				

Biochemistry II					
Course No.	08154		Semester	3	
Format	Lectures		ECTS-Credits	3,0	SWS 3,0
Course contents	A total of 5 lectures are to be completed within the framework of this seminar on the following topics to deepen the specialist knowledge: amino acids, proteins, enzymes, carbohydrates, carbohydrate metabolism, vitamins, lipids, lipid metabolism.				
Institutions	WE03				

Biochemical Practical Course					
Course No.	08151		Semester	3	
Format	Exercise		ECTS-Credits	4,0	SWS 1,5
Course contents	Practical implementation of seven experiments: 1. Proteins (determination of free amino acids with ninhydrin, determination of arginase activity in the liver) 2. Enzymes (electrophoretic separation of LDH isoenzymes in agarose gel, determination of the enrichment of the enzyme lactate dehydrogenase) 3. Carbohydrates (isolation of glycogen from hepatic acid hydrolysate and detection of glucose, determination of glucose-6-phospatase activity in liver extract) 4. Lipids (enzymatic determination of D-3-hydroxybutyrate in the blood, enzymatic cleavage of triacylglycerols by pancreatic lipase, determination of peroxide number) 5. Biological oxidation (extraction of mitochondria from heart muscle, measurement of succinate dehydrogenase reaction, acquisition of cytochrome C absorption spectra, study of cytochrome C oxidase) 6. Nucleic acids (purification of DNA from whole horse blood, enzymatic cleavage of DNA and viscosity measurement, gel electrophoresis of DNA, photometric determination of DNA concentration and purity) 7. Vitamins/hormones (characterization and separation of vitamins, detection of hormonal regulation of blood glucose levels)				
Institutions	WE03				

Proseminar for Exercises in Physiology					
Course No.	08102		Semester	3	
Format	Seminars		ECTS-Credits	2,0	SWS 0,5
Course contents	The preparatory seminars for the physiological exercises serve to deepen selected sub-areas of the knowledge imparted in the lectures. The aim is to discuss basic cell and organ functions in small groups in preparation for or in addition to the physiological exercises in such a way that practical knowledge is built up for the physiological exercises and the examinations in the subject of physiology. The aim is to enable students to independently discuss complex physiological issues.				
Institutions	WE02				

Physiology II					
Course No.	08101		Semester	3	
Format	Lectures		ECTS-Credits	4,0	SWS 4,0
Course contents	Building on the knowledge gained from Physiology I, this second part of the physiology lecture program discusses the central nervous system control of complex functional processes, the specific functions of the individual organs and integrative performances of different organ systems. In addition to an explanation of the structure-function relationships, the special functional processes and their regulation, special attention is paid to the weaknesses relevant to pathophysiological derailments and pharmacological intervention points in the discussion of the individual organ systems.				
Institutions	WE02				

Anatomy class II (Ungulates, Rabbit & Rodents, Birds)					
Course No.	08055		Semester	4	
Format	Exercise		ECTS-Credits	4,0	SWS 2,0
Course contents	Deepening and broadening practical skills; Deepening and expanding the anatomical knowledge of the body cavities of large domestic mammals (cattle, horses, pigs, small ruminants) as well as introduction to the anatomy of pets (rodents, rabbits, ornamental birds, exotics) on the basis of unfixed animal carcasses. Introduction to the anatomy of commercial poultry. Presentation of clinically significant structures of the body cavities and internal organs using the example of clinical questions. Knowledge of the projection of the organs onto the body wall. Deepening of comparative-anatomical knowledge. Identification of the functional adaptation of certain organ systems to certain living conditions of the different species. Comparison of the mammal and bird baseline. Learning the knowledge of anatomically relevant basics for soft tissue surgery and simulation of standard procedures. Deepening of specialist knowledge, development of rhetorical skills and intensification of professional communication between students or between students and academic staff through so-called "competence teams".				
Institutions	WE01				

Histology II (Microscopic Anatomy II)					
Course No.	08061		Semester	4	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Microscopic anatomy of the digestive, respiratory, genitourinary, nervous system and sensory organs, each with functional reference. Establishing references to clinical situations or cases and integrating the various fields of knowledge.				
Institutions	WE01				

Histology II (Microscopic Anatomy II) and Embryology Course					
Course No.	08063		Semester	4	
Format	Exercise		ECTS-Credits	4,0	SWS 2,0
Course contents	Independent microscopic diagnostics of all organ systems of domestic mammals and poultry as well as the most important structures during embryonic development and the placenta. Deepening of knowledge especially for the histological-microscopic diagnostics of the respective course preparations. Basic knowledge in the differentiation of physiological and pathologically altered tissue. Maximization of professional competence through peer instructing (= teaching by students accompanied and supported by the lecturers). Intensification of professional communication between students or between students and lecturers.				
Institutions	WE01				

Embryology					
Course No.	08065		Semester	4	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Development of essential principles of developmental biology and embryology including medical and experimental embryology such as differentiation and determination, epithelial and mesenchymal interactions, role of growth factors, signaling molecules and cell adhesion molecules, proliferation and apoptosis, embryonic induction and cell migration.				
Institutions	WE01				

Clinical Biochemistry and Physiology					
Course No.	08153		Semester	4	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Selected, clinically particularly relevant topics in biochemistry and physiology are taught in close coordination with colleagues from the two disciplines. From the explanation of pathobiochemical and pathophysiological relationships, references to laboratory diagnostics are derived. This course serves as mandatory preparation for the course "Clinical Laboratory Diagnostics" in the 6th semester. The chronological sequence of the coordinated teaching will be announced on a notice board or on the blackboard.				
Institutions	WE03				

Physiological Exercises (4th semester)					
Course No.	08103		Semester	4	
Format	Exercise		ECTS-Credits	5,0	SWS 2,5
Course contents	- Deepening of the teaching content taught in the lectures and preparatory seminars - Acquisition of application-ready knowledge of important experimental methods in physiology as well as selected methods of laboratory and clinical diagnostics - Ready-to-use knowledge of the orders of magnitude of clinically relevant physiological variables - Training of dexterity in the handling of laboratory animals, laboratory equipment and computer-aided evaluation procedures				
Institutions	WE02				

Physiology III (4th semester)					
Course No.	08104		Semester	4	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	In this third part of the physiology lecture program, selected topics of physiology that are clinically particularly relevant are taught. In close coordination, colleagues from biochemistry and clinics will present pathobiochemical and laboratory diagnostic content.				
Institutions	WE02				

Animal Welfare Seminar					
Course No.	08552		Semester	4	
Format	Seminars		ECTS-Credits	4,0	SWS 2,0
Course contents	Practice-relevant animal welfare topics from official practice are presented and discussed in anonymized form. Possible topics are animal husbandry in circuses, cruel breeding in the small animal sector, slaughter of pregnant cattle, euthanasia of pets, hunting, etc. Of great importance is the correct documentation and legal classification of cases relevant to animal welfare.				
Institutions	WE11				

Feed Science					
Course No.	08200		Semester	4	
Format	Exercise		ECTS-Credits	4,0	SWS 2,0
Course contents	The optimal use of feed in the context of a performance-oriented, environmentally friendly and healthy diet of the animals requires detailed knowledge of their ingredients and quality characteristics, the comprehensive presentation of which is a focus of the course, taking into account the essential influencing factors in production, preservation, storage, treatment and processing. The ingredients determined using conventional methods are primarily used to characterise the feed, taking into account pollutants that limit its use. Another aim is to present physical, chemical, biological and biotechnological processes and treatments for improving the quality of feed and feed mixtures. Objectives 1. You will be familiar with the key factors influencing the production, preservation, storage, treatment and processing of animal feed. 2. You will be able to assess feed on the basis of the ingredients identified, taking into account factors limiting its use. 3. They are familiar with the essential physical, chemical, biological and biotechnological processes and treatments for improving the quality of feed and feed mixtures. 4. You are familiar with the main legal framework for feed and feed additives.				
Institutions	WE04				

Electives (Semester 1 to 4)					
Course No.			Semester	1-4	
Format	Seminars		ECTS-Credits	6	SWS 6
Course contents					
Institutions					

6.2 Clinical Section

6.2.1 Courses of the 3rd Year

Clinical Propaedeutics - Small Animals					
Course No.	08952		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 1,5
Course contents	Application of previously discussed theoretical knowledge under guidance in small groups. Topics: handling of the animal, general examination, coercive measures, lymph node palpation, cardiovascular examination, blood draw/injection techniques, examination of eyes, skin, ears, oral cavity, respiratory tract, urinary tract, gastrointestinal tract; neurological examination, lameness diagnosis, dressing theory; Examination of small pets. Students should be familiar with the theoretical foundations of the propaedeutic content. They should be able to carry out a complete clinical general examination, including special examinations of small animals and pets, and to be able to interpret the findings.				
Institutions	WE20				

Clinical Propaedeutics - Reproduction					
Course No.	08902		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 1,5
Course contents	This course is linked to Clinical Propaedeutics – Ruminants, Camelids and Pigs				
Institutions	WE18				

Clinical Propaedeutics - Ruminants, Camelids and Pigs					
Course No.	08854		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 1,5
Course contents	The paramount importance of a thorough clinical examination, even in the age of modern technical diagnostic possibilities, is impressively demonstrated in scientific studies. Within the framework of this course, the handling of the livestock, the clinical examination procedure and basic diagnostic and therapeutic skills in ruminants, camelids and pigs are taught (introduction by means of time-independent online events or scripts; practical training in face-to-face courses); The students train basic, non-invasive examination methods under guidance in small groups on live animals. Instruction is provided on occupational safety and biosafety when handling farm animals.				
Institutions	WE18				

Clinical Propaedeutics -Equine					
Course No.	08802		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 1,5
Course contents	In this course, the diagnostic procedure for the examination of the most important organ systems in horses will be presented theoretically and practically. In each case, a theoretical introduction is offered in the lecture hall of the Equine Clinic and in the following week, a practical exercise is performed on the treated organ system of interest in small groups on a living horse.				
Institutions	WE17				

Clinical Propaedeutics - Communication						
Course No.	08082		Semester	5		
Format	Exercise		ECTS-Credits	1,0	SWS	1,0
Course contents	This course is a practical course and requires your active participation. There will be 3 different real-life scenarios that you can voluntarily play through with actors (so-called simulation persons) and 1 role play that can be played among each other. There will also be a short e-learning course to prepare you for the course and the different scenarios.					
Institutions	WE17-20					

Animal Hygiene and Environmental Health						
Course No.	08460		Semester	5		
Format	Lectures		ECTS-Credits	2,0	SWS	2,0
Course contents	- Basics of animal hygiene, -Definitions -Ecosystem - livestock-environment interactions, - Legal basis					
Institutions	WE10					

Animal Husbandry						
Course No.	08461		Semester	5		
Format	Lectures		ECTS-Credits	2,0	SWS	2,0
Course contents	- Fundamentals of Animal Husbandry, Physiological Basics, Ethological Basics, Legal Principles - pig farming, cattle farming (incl. calves), poultry farming (laying hens, fattening poultry, waterfowl), - keeping small ruminants, - Horse husbandry, small and pet farming, organic animal husbandry, - Evaluate animal husbandry, - identify animal welfare problems, - Knowing alternative husbandry systems					
Institutions	WE10					

Animal Nutrition						
Course No.	08201		Semester	5		
Format	Lectures		ECTS-Credits	2,0	SWS	2,0
Course contents	The objectives of the lecture are: - The students know the nutritional basics as the basis of feeding - You will have an overview of the scientific findings on animal nutrition of the most important pet species and can assess the energy and nutrient supply - You can assess and assess errors and problems in feeding - You will have an overview of the most important dietary applications for pets, horses and food-producing animals - You know the influence of animal nutrition on the safety and quality of food (meat, milk, eggs)					
Institutions	WE04					

Animal Nutrition					
Course No.	08202		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	The following learning objectives should be achieved: 1. Students acquire knowledge on practical feeding and ration design 2. You have applicable knowledge of errors and limitations in feeding 3. You have basic knowledge of the main diet-related diseases and dietary indications that are important for animal nutrition				
Institutions	WE04				

Specific Aspects of Animal Nutrition					
Course No.	08203		Semester	5	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	The objectives of the lecture are: - Students acquire further knowledge in special subject areas of animal nutrition - This is complementary to the lecture in animal nutrition				
Institutions	WE04				

General and Special Pharmacology and Toxicology					
Course No.	08700		Semester	5	
Format	Lectures		ECTS-Credits	4,0	SWS 4,0
Course contents	Introduction to pharmacokinetics and pharmacodynamics, autonomic nervous system CNS active substances, Narcosis analgesics, cardiovascular drugs, Gastrointestinal pharmaceuticals, Pharmacotherapy of the respiratory tract				
Institutions	WE14				

Clinical Radiology I					
Course No.	08975		Semester	5	
Format	Lectures		ECTS-Credits	1,0	SWS 2,0
Course contents	This lecture deals with the physical basics of X-ray technology and systematic image reporting. Based on the distal limb of the horse, standard projections and X-ray anatomy are explained and common pathological findings are shown.				
Institutions	WE17				

General and Special Virology I (V)					
Course No.	08250		Semester	5	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	The following topics and content are on the lesson plan: General Virology: Morphology and systematics of viruses, replication cycle of RNA and DNA viruses, General Infection Theory: acute and latent infections, Entry points of viruses: local and systemic infections. Humoral and cell-mediated immune response, vaccines, virus detection, diagnostics. Special Virology: Veterinary pathogens of the individual virus families, in particular reportable and notifiable animal disease pathogens. Systematics, replication cycle, entry point, etiology, course and diagnosis of the disease, prevention and control by means of vaccination or hygiene measures, significance for human health in zoonoses				
Institutions	WE05				

General Infectious Medicine/General Bacteriology and Mycology						
Course No.	08350		Semester	5		
Format	Lectures		ECTS-Credits	2,0	SWS	2,0
Course contents	- Basis of infection and epidemic theory, definitions, ecosystem, cause-effect, evolution of pathogen-host relationships - Positive Guest-Host Relationships, Model Diseases - Pathogenesis - Clinically inapparent infections - Infectious diseases - Structure of bacteria - Genetics - Metabolism, Cultivation, Microscopy, Isolation, Detection, Determination, Classification, Taxonomy - Virulence mechanisms incl. pathogenicity islands - Chemotherapy and resistance - General mycology (structure, taxonomy, propagation, virulence mechanisms, isolation, determination) - Etiology, Pathogenesis, Clinic, Therapy of Veterinary Relevant Fungal Infectious Diseases					
Institutions	WE07					

General and Specific Immunology						
Course No.	08300b		Semester	5		
Format	Lectures		ECTS-Credits	1,0	SWS	2,0
Course contents	The following topics will be discussed: Receptors and cells of the non-specific immune system, the complement system, the humoral immune response, structure and function of the histocompatibility complex, T-cell-mediated immune response, cytokines, messengers of the immune system, mucosal immune responses, allergy and hypersensitivity, autoimmune responses, transplantation and immunosuppressants, tumor immunology, vaccination strategies, immune defense against protozoa and helminths.					
Institutions	WE06					

Parasitology Lectures						
Course No.	08650		Semester	5		
Format	Lectures		ECTS-Credits	3,0	SWS	3,0
Course contents	Objectives: Acquisition of in-depth knowledge of general and special veterinary parasitology. Course contents: The most important pathogens in veterinary medicine from the respective subfields of parasitology, i.e. protozoology, helminthology and akarology/entomology, are presented with regard to their morphology, biology, epidemiology, pathogenesis, veterinary and zoonotic significance as well as the clinic caused by them. In addition, the principles of parasitological diagnostics and the basics of therapy and control are discussed.					
Institutions	WE13					

Surgery Block Course						
Course No.	088820		Semester	5		
Format	Exercise		ECTS-Credits	1,5	SWS	1,5
Course contents	In the surgery block course, the theoretical knowledge is applied and deepened at 7 practical stations. The work is done in small groups.					
Institutions	WE20					

Surgery - Basic Principles					
Course No.	08812		Semester	5	
Format	Lectures		ECTS-Credits	1,0	SWS 2,0
Course contents	This event is held in cooperation with Small Animal Surgery, Equine Clinic and Clinic for Hoofed Animals. General surgical topics will be discussed.				
Institutions	WE20				

General Pathology with Exercises (lecture)					
Course No.	08600V		Semester	5	
Format	Lectures		ECTS-Credits	1,5	SWS 3,5
Course contents	Overview of pathological conditions and processes in the whole organism including their definition and their specific nomenclature. General disease principles and mechanisms as well as classification of pathological processes in the organism as a whole.				
Institutions	WE12				

General Pathology with Exercises (practice)					
Course No.	08600Ü		Semester	5	
Format	Exercise		ECTS-Credits	0,5	SWS 0,5
Course contents	Overview of pathological conditions and processes in the whole organism including their definition and their specific nomenclature. General disease principles and mechanisms as well as classification of pathological processes in the organism as a whole.				
Institutions	WE12				

Herd Health Management					
Course No.	08904		Semester	5	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents					
Institutions	WE18				

Special Pharmacology and Toxicology					
Course No.	08701		Semester	6	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	Drug and drug properties:pKa value, molecular weight, isomerism forms, binding properties, receptor effects and internal signaling pathways, modes and forms, dose and dose-response relationships, side effect and toxic effect, drug kinetics, types and sites of absorption of drugs and influencing factors, protein binding and distribution of drugs, compartments, elimination of active ingredients: excretion, biotransformation forms and Influencing factors, possible consequences of repeated drug administration (tolerance, resistance and dependence, resistance, allergy development, cumulation, etc.), pharmogenetics (animal species differences in AM effect).				
Institutions	WE14				

Special Virology II					
Course No.	08251		Semester	6	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	The lecture series "Special Virology II" deepens the knowledge of viral infections in domestic, pet and wild animals. In an organ-based approach, students learn which viruses cause changes in different organs (pathogenesis) and which differential diagnoses are possible. In addition, current topics in veterinary virology, such as African swine fever, will be discussed.				
Institutions	WE05				

Virological Exercises					
Course No.	08253		Semester	6	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	In the virology internship, students learn the most common methods of virus diagnostics. These include direct and indirect detection methods, such as the ELISA, the HA test, the HA inhibition test, the plaque test and quantitative (real-time) PCR. After an introduction to virus diagnostics, participants will conduct these experiments themselves in small groups of 6-8 students under the guidance of a tutor and discuss their results. In addition, important topics such as the preparation of samples and the prevention of contamination are addressed.				
Institutions	WE05				

Special Bacteriology and Mycology					
Course No.	08352		Semester	6	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Students can... - Taxonomic classification of pathogens, explanation of pathogen properties - Explaining the pathogenesis of infectious diseases - explain the symptoms of infectious diseases - define the habitats of the pathogens - explain relevant diagnostic methods - specific therapy and prophylaxis recommendations - explain infectious epidemiological aspects of the respective infectious disease (reservoirs, prevalences, transmission routes, etc.)				
Institutions	WE07				

Bacteriology and Mycology (practical course)					
Course No.	08354		Semester	6	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Protective measures when dealing with infectious agents; Collection and dispatch of materials for bacteriological examination. Conducting an examination including preparation of an antibiogram of isolated pathogens, microscopy in bacteriology, technique and objectives of cultural examination; microscopic imaging and culture of representatives of the most important bacterial genera in veterinary medicine; molecular biological diagnostics of bacteria by means of polymerase chain reaction and DNA-DNA hybridization; precipitation reaction for the detection of group-specific polysaccharide antigen in streptococci; Identification of some biochemical features for species differentiation in the family Enterobacteriaceae; Detection of colonies suspected of Salmonella by means of polyvalent sera; phage typing of Salmonella; microscopic representation of shoot and filamentous fungi of veterinary importance, with special consideration of the possibilities of differentiation by assessing their vegetative and generative reproduction structures; culture of mushrooms; molecular biological methods for the fine typing of bacteria, molecular detection of virulence factors.				
Institutions	WE07				

Parasitological Exercises						
Course No.	08651		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	2,0
Course contents	Educational objective: Acquisition of in-depth knowledge of the morphology of parasites of veterinary importance and their developmental stages, including their detection techniques. Deepening knowledge of their epidemiology, pathogenesis, clinic, diagnosis, zoonotic significance, therapy and control. Course contents: The most important pathogens in veterinary medicine from the respective subfields of parasitology, i.e. protozoology, helminthology and akarology/entomology, are treated.					
Institutions	WE13					

Clinical Laboratory Diagnostics						
Course No.	08953		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	2,0
Course contents						
Institutions	WE20					

Meat Hygiene I						
Course No.	08450		Semester	6		
Format	Lectures		ECTS-Credits	1,0	SWS	1,0
Course contents	Overview of vertical and horizontal operations in the food chains					
Institutions	WE09					

Food Hygiene I						
Course No.	08400		Semester	6		
Format	Lectures		ECTS-Credits	1,0	SWS	1,0
Course contents	- Introduction to the topic of food hygiene, - Continuation of the curriculum on "Bacteriology, Mycology and Virology", - Preparation for the "Food Testing and Technology" exercises - Residues/contaminants in food - Chemical testing of foodstuffs Students will be able to... - Explain the principles of food safety - explain the basics of food microbiology (influences on the survival, death and reproduction of microorganisms) - provide an overview of the health damage caused by food - Explain the basics of food spoilage					
Institutions	WE08					

Special Pathology with Exercises (lecture)						
Course No.	08601a		Semester	6		
Format	Lectures		ECTS-Credits	1,2	SWS	1,2
Course contents	Students will be able to... - Explain the principles of food safety - explain the basics of food microbiology (influences on the survival, death and reproduction of microorganisms) - provide an overview of the health damage caused by food - Explain the basics of food spoilage					
Institutions	WE12					

Special Pathology with Exercises (practice)					
Course No.	08602a		Semester	6	
Format	Exercise		ECTS-Credits	0,5	SWS 0,5
Course contents	- Learning how to handle infectious sample material - Learning simple conventional and molecular methods of bacteriological and mycological infection diagnostics - Learning working techniques that are necessary when dealing with infectious agents - infectiological case descriptions, different strategies for the diagnosis of different pathogens relevant to veterinary medicine				
Institutions	WE12				

Dairy Hygiene					
Course No.	08410		Semester	6	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents					
Institutions	WE08				

Organ Block 2: Gynaecology / Andrology (OZL)					
Course No.	088802		Semester	6	
Format	Lectures		ECTS-Credits	2,0	SWS 2,1
Course contents	- Students are aware of the physiological and pathological aspects of the action of sex hormones/sexual cycle in male and female animals of different animal species. - Students are able to examine and assess female and male animals with regard to their sexual health, breeding suitability and udder health. Aspects relating to animal welfare, food hygiene and economic efficiency also play a role here. - Students are able to recognise and assess reproductive diseases and disorders and to carry out the right therapeutic measures. This includes, among other things, aspects of infertility, pregnancy, obstetric issues and neonatology.				
Institutions	WE18				

Organ Block 3: Gastro (OZL)					
Course No.	088803		Semester	6	
Format	Lectures		ECTS-Credits	2,5	SWS 2,7
Course contents	The block encompasses a network of the specialties of internal medicine, surgery (horse, ruminants, pigs, small animals) and pathology regarding the gastrointestinal tract.				
Institutions	WE17				

Organ Block 4: Liver (OZL)					
Course No.	088804		Semester	6	
Format	Lectures		ECTS-Credits	0,8	SWS 0,6
Course contents	- Students should know and understand the causes and pathomechanisms of liver and pancreas diseases in different animal species. - The students should be able to know, apply and evaluate the diagnostic possibilities for differentiating diseases of the liver and pancreas in different animal species. - Students should know and understand causative agents of infectious liver and pancreatic diseases and ways of diagnosis/detection. - With knowledge of the causes and their possible diagnostics, the students should develop therapy plans and, if necessary, therapies. strategies for prophylaxis. A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE12				

Organ Block 5: Kidney (OZL)						
Course No.	088805		Semester	6		
Format	Lectures		ECTS-Credits	0,5	SWS	0,4
Course contents	- Students should understand the structure and function of the kidney and the urinary tract - Students should explain how to control kidney function - Students should describe the examination of the kidneys and urinary tract - Students should explain the morphological changes and dysfunctions of the kidney and urinary tract - Students should be able to recognize and assess the most important clinical manifestations of diseases of the kidney and urinary tract - Students should be able to apply necessary treatments					
Institutions	WE02					

Organ Block 6: Respiratory tract (OZL)						
Course No.	088807		Semester	6		
Format	Lectures		ECTS-Credits	0,7	SWS	1,1
Course contents	- Students should know and understand the causes and pathomechanisms of respiratory diseases of the different animal species. - The students should be able to know, apply and evaluate the diagnostic possibilities of differentiating respiratory diseases of the different animal species. - Students should know and understand infectious agents in the respiratory tract and ways to diagnose them. - Students should be able to develop therapy/prophylaxis plans and strategies based on their knowledge of causes and diagnostic options.					
Institutions	WE17					

Organ Block 8: Circulation (OZL)						
Course No.	088808		Semester	6		
Format	Lectures		ECTS-Credits	1,0	SWS	0,7
Course contents	- Students should know and understand the causes and pathomechanisms of cardiovascular diseases in different animal species. - The students should be able to know, apply and evaluate the diagnostic possibilities of differentiating between cardiovascular diseases of the different animal species. - Students should know and understand cardiac infectious agents and ways to diagnose them. - Students should be able to develop therapy/prophylaxis plans and strategies based on their knowledge of causes and diagnostic options.					
Institutions	WE17					

Clinical Case Work - Small animals and pets						
Course No.	08950		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	2,0
Course contents	Presentation and interactive discussion of clinic patients (dogs, cats, pets, reptiles) with internal, dermatological, oncological, neurological, surgical and ophthalmological diseases; problem-oriented case processing; Preparation of problem-oriented medical reports On the basis of a large number of clinical cases, the student should learn the problem-oriented case processing including anamnesis and clinical examination (anamnesis and clinical examination, preparation of a problem list, differential diagnoses, diagnostic plan, evaluation of the findings, preparation of a therapy plan, prognostic assessment					
Institutions	WE20					

Clinical Case Work - Reproduction						
Course No.	08900		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	1,0
Course contents	Demonstration of clinic patients (ruminants, pigs) with reproductive disorders and case studies of herd reproduction					
Institutions	WE18					

Clinical Case Work - Farm Anmimals						
Course No.	08851		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	1,0
Course contents	Demonstration of clinic patients (ruminants, pigs) with internal and surgical diseases, reproductive disorders (pigs) and case studies of herd diseases The students are able to draw up a differential diagnosis list for a sick farm animal (ruminant or pig) based on the findings of the clinical examination. They can name further investigations that contribute to the concretization of the diagnosis and can give a prognosis, taking into account economic aspects, and formulate a treatment plan or preventive measures for a food-producing animal.					
Institutions	WE18					

Clinical Case Work - Equine						
Course No.	08800		Semester	6		
Format	Exercise		ECTS-Credits	2,0	SWS	2,0
Course contents	As part of this exercise, hospital patients with particularly frequent or particularly interesting orthopaedic, surgical, internal medicine or reproductive medical conditions are examined by students in groups of 2-3 or examination findings are provided and the case is then presented to the semester in a presentation of about 20 minutes. This should be as interactive as possible and invite people to think/discuss with us, for which another 10 minutes are available. The aim is not to start from the diagnosis, but from the clinical leading symptom and to work out by the students how to proceed and what findings result from the individual examination steps. Participants are students of the 6th semester					
Institutions	WE17					

Cross-sectional teaching: Interdisciplinary Case Work						
Course No.	08817		Semester	6		
Format	Seminars		ECTS-Credits	4,0	SWS	4,0
Course contents	Using a blended learing approach, students solve a portfolio of clinical and VPH case studies from the broad field of veterinary medicine. Cases strengthen interdisiplinary thinking. They are provided at the online platform QuerVet for self-guided learning. Discussion rounds in presence complement and deepen the theoretical understanding and interdisciplinary problem-solving competencies.					
Institutions	WE17					

6.2.2 Courses of the 4th Year

EU Regulations on Veterinary Medicinal Products, Controlled Substances, and Medicated Feed					
Course No.	08710		Semester	7	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	Introduction to European and German veterinary medicines law, special features of the use, prescription and dispensing of medicinal products for food-producing animals, BTM Act, BTMVV, prescriptions of medicinal products (prakt. Exercise)				
Institutions	WE14				

Galenics (practical course)					
Course No.	08711		Semester	7	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	- Basic knowledge of different dosage forms and their production - Labelling of medicinal products - Calculation of the maximum dispensing prices of medicinal products according to the Medicinal Products Price Regulation - Prescription of drugs and narcotics				
Institutions	WE14				

General and Clinical Radiology II					
Course No.	08974		Semester	7	
Format	Lectures		ECTS-Credits	2,0	SWS 1,0
Course contents	The lecture includes X-ray diagnostics of the proximal limb as well as head and trunk images of the horse. In addition, the basics of ultrasound diagnostics and the advanced imaging procedures CT, MRI and scintigraphy are presented.				
Institutions	WE17				

Animal Epizootic Control I					
Course No.	08360		Semester	7	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Students will be able to: - Explain the objectives, strategies and methods of animal disease control - reproduce and explain the content of the relevant animal health regulations (Animal Diseases Act, Livestock Traffic Ordinance, Animal Vaccine Ordinance, Pig Husbandry Hygiene Ordinance) - Identify national and supranational databases and data collection in the context of animal disease control and explain their functions - Designate national and supranational bodies and bodies in the context of animal disease control and explain their tasks - Evaluation of research and control of animal diseases in animal populations on the basis of infection epidemiological indicators				
Institutions	WE07				

Anesthesia & Intensive Care Block Course					
Course No.	088819		Semester	7	
Format	Exercise		ECTS-Credits	1,5	SWS 1,5
Course contents	In the block course Anesthesiology/Internal Medicine, the theoretical knowledge is applied and deepened at several practical stations. The work is done in small groups.				
Institutions	WE17				

Anaesthesia and Pain Management					
Course No.	08813		Semester	7	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	This lecture deals with the topic of anesthesia and pain management in all animal species.				
Institutions	WE17				

Meat Hygiene II					
Course No.	08453		Semester	7	
Format	Lectures		ECTS-Credits	2,0	SWS 1,0
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE08				

Food Science – Practical Course I					
Course No.	08402		Semester	7	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Carrying out general and special investigations on the subject of fish and fish products, microbiology I, and II, histology, sensory analysis Practical examination of food, vegetarian and vegan substitutes as well as various medications. other food groups				
Institutions	WE08				

Food Science					
Course No.	08401		Semester	7	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	This lecture provides an overview of food preservation as well as the various effects of microbiological factors on food intoxication and food spoilage				
Institutions	WE08				

Special Pathology with Exercises (practice)					
Course No.	08602		Semester	7	
Format	Exercise		ECTS-Credits	0,5	SWS 0,5
Course contents	Preparation of pathological-anatomical diagnoses and differential diagnoses and epicritical assessment of the etiology and relevance with regard to the clinic				
Institutions	WE12				

Pathologic-Anatomical Demonstrations I					
Course No.	08605		Semester	7	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	Preparation of pathological-anatomical diagnoses and differential diagnoses and epicritical assessment of the etiology and relevance with regard to the clinic				
Institutions	WE12				

Special Pathology with Exercises (lecture)					
Course No.	08601		Semester	7	
Format	Lectures		ECTS-Credits	1,2	SWS 1,2
Course contents	Preparation of pathological-anatomical diagnoses and differential diagnoses and epicritical assessment of the etiology and relevance with regard to the clinic				
Institutions	WE12				

Dairy Analysis – Practical Course					
Course No.	08411		Semester	7	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Demonstration or implementation of corresponding practical exercises under supervision. e.g. determination and assessment of milk quality, product training/sensory analysis of milk, dairy products, butter and cheese. Preparation of a report, diagnosis and evaluation of milk and dairy products				
Institutions	WE08				

Organ Block 6: Birth (OZL)					
Course No.	088806		Semester	7	
Format	Lectures		ECTS-Credits	2,4	SWS 2,4
Course contents					
Institutions	WE18				

Organ Block 9: Blood (OZL)					
Course No.	088809		Semester	7	
Format	Lectures		ECTS-Credits	1,4	SWS 1,4
Course contents	- Students should know and understand the causes and pathomechanisms of anemias, vascular diseases and neoplasms of the hematopoietic organs. - Students should be able to know, apply and evaluate the diagnostic possibilities of differentiating between anaemia and hematopoietic neoplasms. - Students should know and understand infectious agents in the blood and hematopoietic system and ways to diagnose them. - Students should be able to develop therapy/prophylaxis plans and strategies based on their knowledge of causes and diagnostic options. A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE12				

Organ Block 10: Movement (OZL)					
Course No.	088810		Semester	7	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE17				

Clinical Case Work - Small and Pet Animals					
Course No.	08951		Semester	7	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Presentation and interactive discussion of clinic patients (dogs, cats, pets, reptiles) with internal, dermatological, oncological, neurological, surgical and ophthalmological diseases; problem-oriented case processing; Preparation of problem-oriented medical reports On the basis of a large number of clinical cases, the student should learn the problem-oriented case processing including anamnesis and clinical examination (anamnesis and clinical examination, preparation of a problem list, differential diagnoses, diagnostic plan, evaluation of the findings, preparation of a therapy plan, prognostic assessment)				
Institutions	WE20				

Clinical Case Work II - Reproduction					
Course No.	08901		Semester	7	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	Presentation, examination and discussion of patient and demonstration animals (across animal species: ruminants, horses, dogs, cats, pets) on: - gynaecological, obstetric, andrological and neonatal issues, - Introduction and implementation of special examination techniques and treatment methods, including surgical interventions (including caesarean sections, teat operations, castrations) as well as biotechnical methods. Presentation, examination and discussion of animals as part of the determination of breeding suitability and udder health.				
Institutions	WE18				

Clinical and Herd Health Case Presentations in Ruminants, Camelids and Pigs					
Course No.	08852		Semester	7	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	As part of the course, cases (individual animals and herd problems) in the field of internal and surgical diseases and reproductive medicine and udder health will be presented and worked on in dialogue with the students.				
Institutions	WE18				

Clinical Case Work II - Equine					
Course No.	08801		Semester	7	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Within the framework of this exercise, hospital patients with particularly frequent or particularly interesting orthopaedic, surgical, internal medicine or reproductive medicine clinical pictures are examined by students in groups of 3 or examination findings are provided and the case is then presented to the semester in a presentation of approx. 30 minutes. This should be made as interactive as possible and invite people to think along with each other, for which another 15 minutes are available. The aim is not to start from the diagnosis, but from the clinical leading symptom and to work out by the students how to proceed and what findings result from the individual examination steps. Participants are students of the 7th semester				
Institutions	WE17				

Cross-sectional teaching: Interdisciplinary Case Work					
Course No.	08777		Semester	7	
Format	Seminars		ECTS-Credits	4,0	SWS 4,0
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE16				

Clinical Coaching (EVC)					
Course No.	08997		Semester	7	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	The general coaching course entitled Clinical Coaching is the first block of an event consisting of a total of three blocks "Emergency Medicine and Coaching Course": In the 'general coaching course', communicative, didactic and leadership skills are specifically trained. These skills are taught to students in practical exercises. The completion of this block is a mandatory prerequisite for participation in the blocks 'Specialist Coaching' and 'Emergency Medicine' in the 8th semester.				
Institutions	WE05				

Forensic Veterinary Medicine					
Course No.	08815		Semester	8	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	- Introduction to the basics of jurisprudence; - Veterinarian in court; - Veterinary certificates, protocols, expert opinions; Introduction to the Civil Code; - General Sales Law; - Purchase of animals, sale of consumer goods, other purchase of horses, special law on the sale of animals in the trade in farm animals; - General liability law; - Special Liability Law for Veterinarians, Legal Liability, Contractual Liability; contract for work; Contract of employment; - Terms & Conditions; - Purchase examination; General and special due diligence (injection, infusion, rectal examination, colic, anesthesia, castration); - Liability cases in practice and clinic, professional indemnity insurance, liability veterinarian/blacksmith; Keepers - Medicines Act (repurposing, therapy emergency), equine passport, animal insurance; - Animal Welfare Law, Doping, Euthanasia, Veterinary Fee Schedule (GOT)				
Institutions	WE18				

Lecture on Laboratory Animal Science					
Course No.	08560		Semester	8	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	- Legislation relevant to laboratory animal science (TierSchG, TierSchVersV, TierSchTrV, EC 1/2005, Directive 63/2010 EU, ETS 123) - Husbandry and hygiene of laboratory animals - Import and export of laboratory animals - Breeding strategies - Generation of transgenic mouse lines - Anatomy, physiology and biology of the most commonly used laboratory animal species (mouse, rat, rabbit, pig, chicken) - Load assessment - Pain detection and treatment - Anesthesia and animal welfare-friendly killing methods - Commonly used animal models in biomedical research - Alternative methods to animal experiments				
Institutions	WE11				

Animal Disease Control II					
Course No.	08361		Semester	8	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	Students will be able to ... - Designate reportable and notifiable animal diseases - Explain the content and purpose of regulations adopted for the control of these animal diseases - Explain the characteristics (etiology, pathogenesis, infection epidemiology and diagnostics) of these animal diseases that are relevant for control - Discuss the pros and cons of control programs				
Institutions	WE07				

Diseases of Reptiles, Amphibians and Pets					
Course No.	08962		Semester	8	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	Within the framework of the module lectures, students should learn about the most important diseases of reptiles, amphibians and fish in a practical way.				
Institutions	WE20				

Diseases of Bees and Fish					
Course No.	08963		Semester	8	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents	The students of veterinary medicine are to be given an insight into selected areas of bee biology based on their knowledge of general zoology. Based on this and equipped with the knowledge of general parasitology, as well as microbiology and animal disease theory, an overview of the diseases of honey bees is provided. The focus is on the diseases that are relevant in practice. legal provisions relevant to official veterinarians in the context of the detection and control of notifiable bee diseases conveyed in a practical way.				
Institutions	WE03				

General Ophthalmology (V)					
Course No.	08954		Semester	8	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Cross-species knowledge in the field of general ophthalmology including ophthalmological diagnostics, problem-oriented case processing and diagnosis, therapy and surgery of eye diseases. Diseases of the orbit, eyelids, conjunctiva, nictitating membrane, cornea, anterior chamber of the eye, lens, vitreous and retina, bulb, uveitis and glaucoma, neurophthalmology.				
Institutions	WE20				

Meat Hygiene III					
Course No.	08451		Semester	8	
Format	Lectures		ECTS-Credits	1,0	SWS 1,0
Course contents					
Institutions	WE08				

Practical Course Meat Hygiene and Inspection					
Course No.	08452		Semester	8	
Format	Exercise		ECTS-Credits	3,0	SWS 3,0
Course contents					
Institutions	WE08				

Practical Course Food Hygiene II					
Course No.	08403		Semester	8	
Format	Exercise		ECTS-Credits	2,0	SWS 2,0
Course contents	Carrying out general and special investigations on the subject of raw sausage / cured products, boiled and cooked sausages, eggs and delicatessen, poultry, insects as food-producing animals and plant-based foods				
Institutions	WE08				

Special Pathology with Exercises (practice)					
Course No.	08602c		Semester	8	
Format	Exercise		ECTS-Credits	0,5	SWS 0,5
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE12				

Pathologic-Anatomical Demonstrations II					
Course No.	08606		Semester	8	
Format	Exercise		ECTS-Credits	1,0	SWS 1,0
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE12				

Special Pathology with Exercises (lecture)					
Course No.	08601c		Semester	8	
Format	Lectures		ECTS-Credits	1,2	SWS 1,2
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE12				

Poultry Diseases					
Course No.	08750		Semester	8	
Format	Lectures		ECTS-Credits	2,0	SWS 2,0
Course contents	As part of this event, the most important diseases of poultry will be presented. In addition to the etiology, pathogenesis, diagnosis, therapy and prophylaxis of infectious diseases, the husbandry of poultry and laboratory diagnostic methods are also discussed. This is intended to give students an overview, but in-depth self-study is required.				
Institutions	WE15				

Organ Block 11: Nerves (OZL)					
Course No.	088811		Semester	8	
Format	Lectures		ECTS-Credits	1,0	SWS 0,9
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE20				

Organ Block 13: Metabolism (OZL)					
Course No.	088813		Semester	8	
Format	Lectures		ECTS-Credits	2,0	SWS 1,5
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.				
Institutions	WE18				

Organ Block 14: Udder (OZL)						
Course No.	088814		Semester	8		
Format	Lectures		ECTS-Credits	1,5	SWS	1,1
Course contents	The students know the physiological and pathological aspects of the action of sex hormones/sexual cycle in male and female animals of different animal species. - Students are able to examine and assess female and male animals with regard to their sexual health, breeding suitability and udder health. Aspects relating to animal welfare, food hygiene and economic efficiency also play a role here. - Students are able to recognise and assess reproductive diseases and disorders and to carry out the right therapeutic measures. This includes, among other things, aspects of infertility, pregnancy, obstetric issues and neonatology.					
Institutions	WE18					

Organ Block 15: Skin (OZL)						
Course No.	088815		Semester	8		
Format	Lectures		ECTS-Credits	1,0	SWS	0,8
Course contents	A detailed description of the learning content can be found in the Learning Objectives Catalogue.					
Institutions	WE12					

Organ Block 16: System (OZL)						
Course No.	088816		Semester	8		
Format	Lectures		ECTS-Credits	1,0	SWS	0,6
Course contents	The students are able to master the subject matter covered by systemic diseases at the level of level 2 and 3. They can assess the course of the disease and react to it therapeutically or preventively					
Institutions	WE20					

Clinical Case Work - Poultry						
Course No.	08751		Semester	8		
Format	Exercise		ECTS-Credits	2,0	SWS	2,0
Course contents	On the basis of case studies, important ornamental bird, pigeon and poultry diseases as well as their diagnosis, therapy and prophylaxis are explained and discussed.					
Institutions	WE15					

Cross-sectional teaching: Interdisciplinary Case Work						
Course No.	08819		Semester	8		
Format	Seminars		ECTS-Credits	4,0	SWS	4,0
Course contents	Using a blended learing approach, students solve a portfolio of clinical and VPH case studies from the broad field of veterinary medicine. Cases strengthen interdisiplinary thinking. They are provided at the online platform QuerVet for self-guided learning. Discussion rounds in presence complement and deepen the theoretical understanding and interdisciplinary problem-solving competencies The seminar also includes the cross-section of poultry					
Institutions	WE18					

Specialist Coaching and Emergency Medicine					
Course No.	08998		Semester	8	
Format	Exercise		ECTS-Credits	6,0	SWS 5,0
Course contents	Building on the course Clinical Coaching of the 7th semester, the course Emergency Medicine with the preceding Specialist Coaching imparts basic knowledge and skills of emergency medicine in a peer teaching concept. The 'Specialist Coaching' block prepares students for the role of a coach at a specific emergency ward. In the 'Emergency Medicine' block, hands-on skills as well as decision-making processes in emergency situations are learned and deepened using 16 cross-species and model-based emergency stations. The theoretical preparation for the emergency course takes place on the basis of blended learning modules via tet.folio.				
Institutions	WE03				

Electives (Semester 5 to 8)					
Course No.	99998		Semester	5-8	
Format	Seminars		ECTS-Credits	16,0	SWS 16,0
Course contents					
Institutions					

6.2.3 Courses of the 5th Year

Final clinical Rotation – Pathology					
Course No.	08609		Semester	9	
Format	Exercise		ECTS-Credits	4,5	SWS 4,0
Course contents	The aims of the basic rotation are - Problem- and case-oriented teaching of basic principles of general and special pathology and pathohistology - Teaching the reasons, possibilities and limitations of post-mortem diagnostics - Learning the dissection technique - Getting to know examples of organ and whole-body changes - Writing own autopsy reports - Introduction to biopsy diagnostics (service function for clinicians or for living animals) - Getting to know the tasks and functions of an animal pathology institute - Independently prepare and give a problem-oriented presentation in seminar style				
Institutions	WE12				

Final clinical Rotation – Farm Animal Clinic*					
Course No.	08803		Semester	9	
Format	Exercise		ECTS Credits	25,5	SWS 20,0
Course contents	Consultation of clinic patients (dogs, cats, pets, reptiles) with internal, dermatological, oncological, neurological, ophthalmic and surgical diseases as part of clinical rotation; problem-oriented case processing; preparation of medical reports; Participation in journal clubs; interactive discussion of cases in small groups; X-ray image interpretation; Introduction to anesthesia; Fundamentals of sterility and surgical assistance; Participation in the emergency service (first aid measures, taking X-rays, emergency laboratory tests); Surgical exercises The student should practice problem-oriented case processing on the basis of clinical cases within the framework of rotational teaching (anamnesis and clinical examination, list of problems, differential diagnoses, diagnostic plan, evaluation of findings, preparation of a therapy plan, prognostic assessment); dealing with the client and patient; emergency management; Practicing simple operations				
Institutions	WE20				

Final clinical Rotation - Small Animal Clinic*					
Course No.	08803		Semester	9	
Format	Exercise		ECTS Credits	25,5	SWS 20,0
Course contents	Students of the 9th and 10th semesters each take part in the daily routine of the clinic for eight weeks. In the first week, reproductive medicine on horses is taught in Bad Saarow. In the following introductory week at the Equine Clinic, students are introduced through various structured courses, after which the students are divided into internal medicines, surgery/orthopaedics and emergency services/anaesthesia for two weeks each, including night and weekend services. The clinic patients are distributed to the students, examined by them and presented daily during the ward rounds. In the morning, the program focuses on working in the clinic on special examinations/treatments, while in the afternoon seminars, journal clubs and student case presentations take place. As part of the rotation, two case presentations/medical reports must be prepared as well as two weeks of on-site service or telephone on-call duty at night and on weekends.				
Institutions	WE18				

Final clinical Rotation – Equine Clinic*					
Course No.	08803		Semester	9	
Format	Exercise		ECTS Credits	25,5	SWS 20,0
Course contents	As part of the clinical rotation of the Farm Animal Clinic (Ruminants and Camellids Department, Pig Department, Poultry Department), students are involved in the activities of the Farm Animal Hospital, take part in ambulance trips and visit farm animal farms as part of herd management. Students take part in the clinic's emergency and weekend services. Before practical skills are carried out on patients under supervision, the necessary know-how is imparted in the clinic's 'Skills Lab'.				
Institutions	WE17				

* selectable

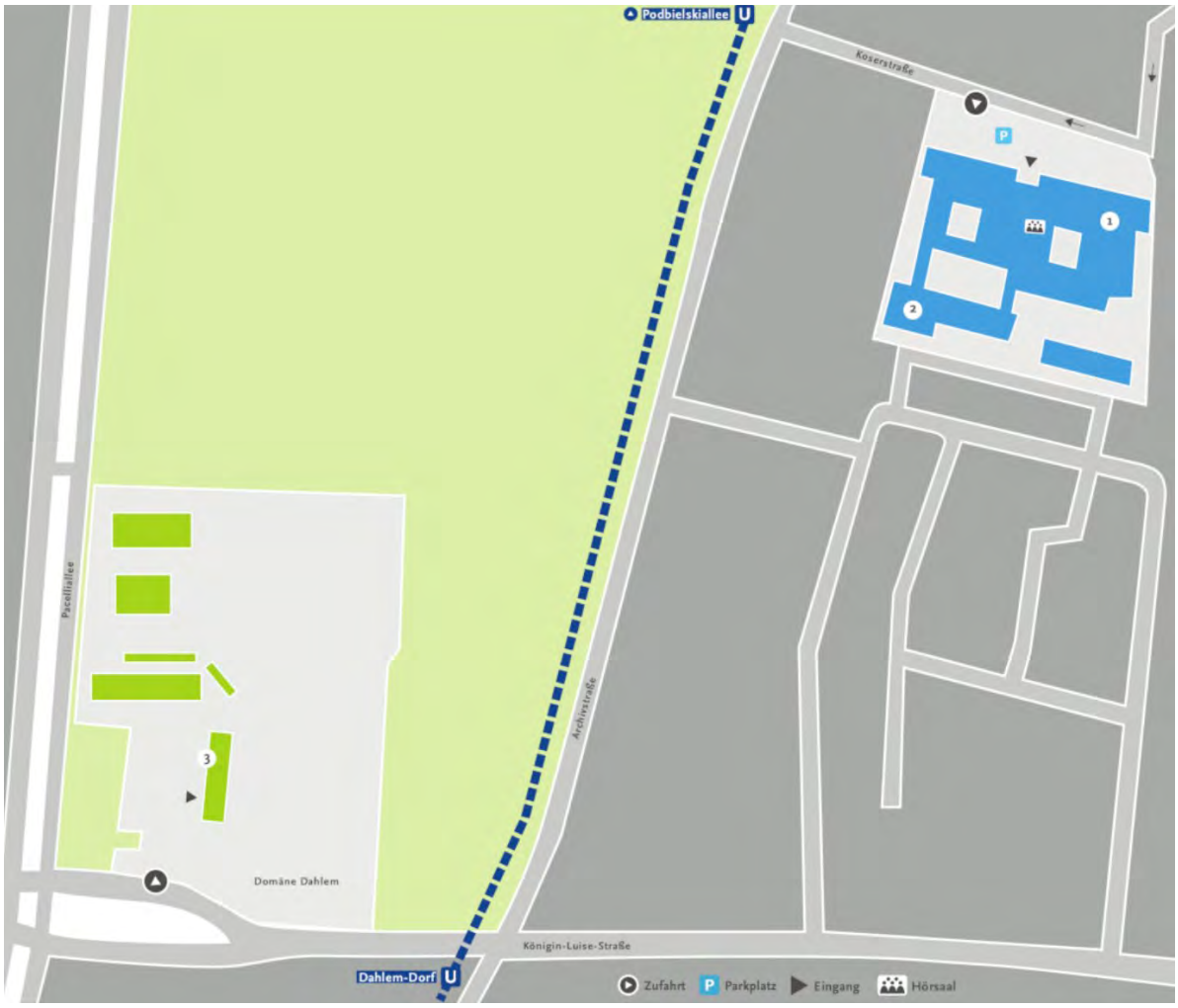
C. Maps of the VEE and the intra-mural and extra-mural facilities used in the core veterinary programme

Map of Düppel Campus

Building 1	• Small Animal Clinic
Building 3	• Equine Clinic - Under construction: Division for Reproduction Medicine
Building 4	• Dean's Office • Administration
Building 6	• Veterinary Library
Building 7	• Student Union canteen
Building 8	• Engineering and Utilities • Institute of Veterinary Physiology, Laboratory

	• Institute of Veterinary Biochemistry, Laboratory
Building 9.1	• Continued Education building "Veterinarium Progressum"
Building 9.2	• Veterinary Medicine Student Representative Group
Building 11	• Institute of Veterinary Physiology
Building 12	• Institute of Veterinary Biochemistry
Building 21	• Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science • Institute of Veterinary Epidemiology and Biostatistics
Building 22-a	• Institute of Food Safety and Food Hygiene
Building 22-b	• Institute of Parasitology and Tropical Veterinary Medicine (barn)
Building 23	• Under construction: Institute of Food Safety and Food Hygiene incl. meat inspection hall "Martin Lerche Building"
Building 25	• Farm Animal Clinic - Division for Ruminants and Camelids (calf barn)
Building 26	• Farm Animal Clinic - Division for Ruminants and Camelids
Building 27	• Farm Animal Clinic - Laboratory - Division for Ruminants and Camelids Unit for Reproduction Medicine and Udder Health • Small Animal Clinic - Division for Reproduction Medicine
Building 28	• Farm Animal Clinic (lecture hall, barn)
Building 30	• Farm Animal Clinic (barn) - Division for Ruminants and Camelids
Building 31-a	• Institute of Veterinary Pathology
Building 31-b	• Institute of Veterinary Pathology
Building 31-c	• IT Unit
Building 31-d	• Farm Animal Clinic, Division for Poultry
Building 32	• Farm Animal Clinic (barn) - Division for Pigs - Division for Ruminants and Camelids, Unit for Reproduction Medicine and Udder Health
Building 34	• Farm Animal Clinic - Division for Pigs - Division for Ruminants and Camelids, Unit for Internal Medicine and Surgery (operation theatre, SkillsNet) Unit for Reproduction Medicine and Udder Health (incl. barn)
Building 35	Robert von Ostertag Building • Institute of Virology • Institute of Immunology • Institute of Microbiology and Epizootics • Institute for Animal Hygiene and Environmental Health • Institute of Parasitology and Tropical Veterinary Medicine
Building 36	• Institute of Food Safety and Food Hygiene
Building 43	• Veterinary Centre for Resistance Research (TZR)

Map of Dahlem Campus



No 1	• Institute of Veterinary Anatomy
No 2	• Institute of Pharmacology and Toxicology
No 3	• Institute of Animal Nutrition

D. Written assessment procedures for QA (Selection)

1. Process Description S.01.01.FU: Implementing Target Agreements [Extract]

Process Purpose:
The purpose of the process "Implementing Target Agreements" is to enshrine the continuously developing university-wide strategic targets at the operational level through a framework of regularly conducted target rounds with all departments.
For this purpose, qualitative and quantitative targets for teaching and learning are identified and agreed upon between the Executive Board and the Dean's Office. The process ensures that the agreed qualitative and quantitative targets are planned and implemented. It also safeguards that testing for their attainment is done regularly. The results of the target agreement rounds are incorporated into subsequent target agreements in the form of content impulses and procedural conclusions.

Process Triggers:
Regular cycles of target agreements, normally every 2 years

Process Responsibility:
Executive Board of Freie Universität Berlin

Process overview (sub-processes and content):
This process description pertains to the general procedures of the target agreement from the perspective of university studies and teaching.

S.01.01.01.FU: Target Agreement Preparation	S.01.01.02.FU: Target Agreement Completion	S.01.01.03.FU: Target Agreement Implementation and Evaluation
• Develop and identify content and suggestions for target agreements • Discuss content and topics for target agreements as part of the strategic meeting • Create a general and department-related key issues paper • Conduct preliminary discussions with department • Finalise negotiating guidelines for each department	• Conduct target agreement discussions • Sign off on target agreements • Present current target agreement to Freie Universität Berlin and in the Academic Senate and Board of Trustees	• Allocate adopted target agreements funds • Implement agreed upon targets • Draw up interim / final report • Examine and document the target agreements' degree of fulfilment • Determine substantive results of target agreements as well as target agreement procedures and set conclusions for future target agreements

Link to the complete Process Description (German Version, VPN connection required):
https://www.fu-berlin.de/sites/prozessmanagement/intern/s_01_01_fu_zielvereinbarung_1_05.pdf

2. Process Description K.01.02.FU: Advancement of Degree Programmes [Extract]

Process Purpose:
The purpose of the process "Advancement of Degree Programmes" is to further develop the range of studies at Freie Universität Berlin according to nationally and internationally recognised scientific and research standards. Furthermore, feedback from students, teachers and graduates on aspects of the current degree programmes as well as modified institutional and subject framework conditions at departments and central institutes can necessitate revisions. Compliance with the framework and structural requirements is ensured by a staggered examination and confirmation procedure. This makes provision for coordination within the subjects as well as between subjects and the central advising units in academic structural development and the Office of the General Counsel in the revision phase. Therefore, the process of revising and developing a degree programme ensures the necessary administrative adjustments within teaching planning, examination administration as well as, if necessary, application and admission procedures.

Process Responsibility:
Executive Board of Freie Universität Berlin

Process Point of Contact:
Academic Affairs Division: academic structural development, Office of the General Counsel

Process overview (sub-processes and content):

K.01.02.FU: Advancement of Degree Programmes		
K.01.02.01.FU: Review and revise degree programme	K.01.02.02.FU: Check revisions of degree programme	K.01.02.03.FU: Approval and implementation of revised degree programme

Link to the complete Process Description (German Version, VPN connection required):
https://www.fu-berlin.de/sites/prozessmanagement/intern/k_01_02_studiengangsweiterentwicklung_2_05.pdf

3. Process Description K.06.01.FU: Providing and Offering Courses [Extract]

Process Purpose:
The purpose of the process, "Providing and Offering Courses" is to make a range of courses available to students of Freie Universität Berlin, which correspond to current study and examination regulations.
In addition, this process is intended to ensure that students are able to participate as fully as possible in the compulsory courses on offer. (The degree programme table ensure these courses do not clash and also special needs of students are taken into account).

Process Responsibility:
Dean's Office at the respective department

Process Point of Contact:
Study and examination offices, curriculum designers and degree programme coordinators at department level

Process overview (sub-processes and content):

K.06.01.FU: Providing and Offering Courses		
K.06.01.01.FU: Prepare courses on offer, recruit, authorise, publish	K.06.01.02.FU: Book a course	K.06.01.03.FU: Follow up on courses on offer

Link to the complete Process Description (German Version, VPN connection required):
https://www.fu-berlin.de/sites/prozessmanagement/intern/k_06_01_lehrangebot_bereitstellen_1_01.pdf

4. Process Description U.02.03.BS: Evaluation of Teaching [Extract]

Process Purpose:
The purpose of the process "Evaluation of Teaching" is to provide teachers with individual feedback from students' points of view in regard to the form, content, implementation and student learning success in individual courses. They are thereby encouraged to reflect on their own teaching, the contents conveyed as well as their personal development potential.
Individual feedback on courses and didactic teaching skills is an important starting point for teachers so that they can enter into dialogue with other subject representatives about the content offered. They may also take advantage of appropriate advanced training possibilities and support junior scholars in their respective teaching activities.
In addition, aggregated feedback on evaluated courses allows departments and central institutes to evaluate their range of courses and, if necessary, further develop them in keeping with students' needs.
Therefore, a significant contribution is made to the improvement of teaching quality at Freie Universität Berlin on a sustainable basis.

Process Triggers:
- Regular Evaluation (in accordance with evaluation guidelines)
- As the occasion demands in the first year of teaching activity for newly appointed university professors and teachers at the School of Veterinary Medicine at Freie Universität Berlin
- Occasions at the request of teachers

Process Responsibility:
Dean's Office at the School of Veterinary Medicine

Process Point of Contact:
Advisor for University Studies and Teaching at the School of Veterinary Medicine

Process overview (sub-processes and content):

U.02.03.01.BS: Plan and prepare survey	U.02.03.02.BS: Conduct survey	U.02.03.03.BS: Evaluate, analyse and report survey	U.02.03.04.BS: Evaluate the results of the survey and improve processes
• Inform subject coordinators and lecturers responsible for the topics and new teachers about upcoming teaching evaluation • Fill in registration form for teaching evaluation and send to Advisor for University Studies and Teaching • Prepare survey software and questionnaire • Create a QR code incl. alternative access data (link and password "token") • Send the QR code incl. link and token to the lecturer • Embedding the QR code and/or link and token in lecture materials	• Access to the evaluation by scanning the QR code or via link and token • Fill in the online questionnaire • Send completed online questionnaires	• Analysis of the questionnaires in survey software • Create individual analyses for each teacher and if necessary send information on didactic course offerings or create individual analyses for each course and send to subject coordinators / persons responsible for blocks • Create anonymised and aggregated overall analyses for LeKo and present to the Dean's Office, Education Commission / Faculty Council	• Use further training and qualification courses if necessary • Discuss survey results and, if necessary, agree upon measures

5. Process Description U.02.05.BS: Monitoring of External Practical Training (EPT) [Extract]

Process Purpose:
The purpose of the process "Monitoring of External Practical Training (EPT)" is to obtain feedback on the preparation of students for their respective EPT by Freie Universität Berlin as well as on the quality of EPT and on students' experience and performance during their EPT. For this, logbooks and evaluation forms for students and EPT providers are provided. The process also identifies possible areas for potential improvement. Feedback from students and EPT providers is incorporated into improving study courses on offer.

Process Responsibility:
Dean's Office at the School of Veterinary Medicine

Process Point of Contact:
EPT Office at the School of Veterinary Medicine

Process overview (sub-processes and content):

U.02.05.**01**.BS: Organisation and Preparation	U.02.05.**02**.BS: Carrying out EPT	U.02.05.**03**.BS: Recording and Assessment	U.02.05.**04**.BS: Monitoring and Feedback
VEE: • Presentation of all relevant information and documents for students during information events, in the booklet "Guide to EPT" and on the VEE's website • Presentation of all relevant information, documents, trainings etc. to EPT providers via the German-wide online tool Students: • Follow the instructions and guidelines provided by VEE • Download learning objective catalogue as well as logbook	VEE: • Provides EPT coordinators, ombudspersons, representatives for complaint management and the Vice Dean for Study Affairs as contact persons for requests and complaints channeled via the Study Office Students: • Observe activities listed in the logbook and perform them independently under supervision • Record cases and duties by using the logbook	Students: • Sign the logbook (paper-based) • Fill in evaluation form (paper-based) • Hand in completed logbook, student's evaluation form and EPT certificate personally to the Library Service Desk during opening hours EPT providers: • Review and signature of the logbook (paper-based) • Creation of EPT certificate (paper-based) • Fill in evaluation form (online)	Veterinary Library: • Collects completed logbook, student's evaluation form and EPT certificate and confirms receipt • Forwards logbook, student's evaluation form and EPT certificate to the EPT Office EPT Office: • Forwards EPT certificate to the State Examination Office (LAGeSo) • Quality control of logbooks • Quality control of paper-based evaluation (by students) and online evaluations (by EPT providers) • Feedback on evaluation results

and evaluation form for the respective EPT • Contact EPT providers and sign contractual agreement EPT providers: • Registration at the German-wide online tool • Participation in didactic qualification • Signature of the contractual agreement with the student	EPT providers: • Supervise hands-on training and performance in compliance with the learning objectives according to TAppV and ESEVT SOP as further specified in the logbook		to the responsible EPT coordinators • Presents aggregated overall results to the Dean's Office Vice Dean for Study Affairs: • Presents aggregated overall results to the Education Commission and the Faculty Council

6. Process Description U.02.06.BS: Evaluation of agricultural EPT [Extract]

Process Purpose:
The purpose of the process "Evaluation of agricultural EPT" is to obtain feedback on the quality of extramural training as well as on the preparation of students for their internship organised through Freie Universität Berlin. For this, a survey of students and internship directors is conducted. The process also identifies possible areas for potential improvement. Feedback from students and internship directors is incorporated into improving study courses on offer.

Process Responsibility:
Dean's Office at the School of Veterinary Medicine

Process Point of Contact:
EPT Office at the School of Veterinary Medicine

Process overview (sub-processes and content):

U.02.06.**01**.BS: Plan and Prepare agricultural internships	U.02.06.**02**.BS: Conduct agricultural internships as well as survey	U.02.06.03.BS: Evaluate and analyse agricultural internships. Report on the results	U.02.06.**04**.BS: Evaluate the results of the survey on agricultural internships and improve processes
Variant A: Compact internship in cooperation company • Register for internship • Students to internship directors: Notify cooperation company **Variant B:** Self-initiated organised internship • Search for company licensed for internships • Coordinate training plan and confirm fulfilment of specifications	• Carry out internship conforming to training plan • If necessary, draw up daily records and internship report (Variant B) • Download and fill in surveys assessing agricultural internships (students and internship directors). Forward to EPT Office • If necessary, fill out internship certificate and send to EPT Office with internship report (Variant B)	• Questionnaires for assessing agricultural internships are scanned and evaluated in survey software • Present aggregated overall survey results • Archive questionnaires for assessing agricultural internships for student access	• Identify areas with improvement potential • Discuss survey results and, if necessary, agree upon measures • Report evaluation results within the annual quality report to the Executive Board

	• Create internship certification and forward to LAGeSo		

7. Process Description K.05.01.BS: Organising and Managing Erasmus-Study Exchanges, Visiting Students [Extract]

Process Purpose:
The purpose of the process "Organising and Managing Erasmus Study Exchanges (Visiting Students) is to coordinate and sign the learning agreement that forms part of the preparation for Erasmus study exchanges and other programmes as well as to grant temporary FU affiliation to Erasmus exchange students so that they can partake in university studies.
In the course of this process, objective group specific features as well as information requirements are factored into the appropriate range of services and studies.

Process Triggers:
International exchange students who would like to partake in a time-limited Erasmus exchange at Freie Universität Berlin

Process Responsibility:
The Dean's Office at the School of Veterinary Medicine, Division for External Affairs

Process Point of Contact:
Erasmus Coordinator at the School of Veterinary Medicine, Division for External Affairs:
Unit for International Student Mobility

Process overview (sub-processes and content):

K.05.01.01.BS: Conduct application and nomination	K.05.01.02.BS: Conduct pre-enrollment	K.05.01.03.BS: Conduct personal enrollment	K.05.01.04.BS: Initiate Erasmus study exchange
• Apply at the home university for an Erasmus study exchange at Freie Universität Berlin • Conduct selection procedure • Nominate candidates • Check learning agreement. Examine and sign	• Download request for pre-enrollment from Distributed Campus internet portal. Fill in and forward. • Update student details in student records • Assign provisional enrollment number • Send invitation for central orientation days with further information	• Submit health insurance evidence or evidence for exemption • Calculate semester fees • Issue Certificate of Arrival • Submit completed enrollment request and documentation for enrollment • Update student details in student records • Check address • Send a semester card and semester ticket transportation pass	• Send information on further aspects of the process • Greet visiting students • Register for and take courses • Take module examinations and certificate • Issue Confirmation of Stay

8. Process Description K.05.02.BS: Organising and Managing Erasmus Study Exchanges, Outgoing Students [Extract]

Process Purpose:
The purpose of the process "Organising and Managing Erasmus Study Exchanges (Outgoing Students)" is to coordinate and sign the learning agreement that forms part of the preparation for Erasmus study exchanges and other programmes. This included to nominate applicants as part of the prerequisite for Erasmus study exchanges as well as to certify completed study and examination achievements in keeping with the requirements of the Erasmus stay abroad and also to complete the process of paying the mobility grant. In the course of this process, objective group-specific features as well as information requirements are factored into the appropriate informations and advising services.

Process Triggers:
Students of Freie Universität Berlin who would like to partake in a time-limited Erasmus exchange at a partner university

Process Responsibility:
The Dean's Office at the School of Veterinary Medicine, Division for External Affairs

Process Point of Contact:
Erasmus Coordinator at the School of Veterinary Medicine, Division for External Affairs: Unit for International Student Mobility

Process overview (sub-processes and content):

K.05.02.01.BS: Conduct application and nomination	K.05.02.02.BS: Initiate Erasmus study exchange	K.05.02.03.BS: Follow up on Erasmus study exchange
• Apply for Erasmus exchange study at a partner university • Conduct selection procedure • Nominate candidate, send notification to applicant and forward nomination to partner university • Check learning agreement. Sign and forward • Forward applicant list to IV C • Submit and sign grant agreement • Arrange payment of 1st instalment of mobility grant	• Register or enroll at partner university • Register for and take courses • Sit examinations • Issue certificate for confirmation of stay	• If necessary, certify study and examination achievements in keeping with the requirements of the Erasmus stay abroad • Submit and check necessary documentation for the 2nd instalment of the mobility grant • Arrange payment of 2nd instalment of the mobility grant

• If necessary, apply for semester on leave		

E. List of scientific publications from the VEE's academic staff in peer reviewed journals during the last three academic years

List sorted by scientific institutions, separate years 2021 to 2023

Table 1: Total number of publications per year 2021-2023 by the School of Veterinary Medicine

Year	Number of Publications
2021	481
2022	436
2023	386

2021

Institute of Veterinary Anatomy (WE01)

1. Glaesmer, H.; Bahramsoltani, M.; Schwerdtfeger, K.; Spangenberg, L. (2021):
Euthanasia distress and fearlessness about death in German veterinarians.
Crisis; 42(1), S. 71–77
econtent.hogrefe.com/doi/10.1027/0227-5910/a000689

2. Bernigau, D.; Bahramsoltani, M.; Corte, G. M.; Reese, S.; Pfarrer, C.; Fietz, D. (2021):
Task force veterinary anatomy: joint efforts of the five German veterinary schools to ensure education during the COVID-19 pandemic.
GMS journal for medical education; 38(5), S. Doc87
www.egms.de/static/en/journals/zma/2021-38/zma001483.shtml

3. Kanevche, K.; Burr, D. J.; Nürnberg, D. J.; Hass, P. K.; Elsaesser, A.; Heberle, J. (2021):
Infrared nanoscopy and tomography of intracellular structures.
Communications biology; 4, S. Article number: 1341
www.nature.com/articles/s42003-021-02876-7

4. Kordowitzki, P.; Merle, R.; Hass, P.-K.; Plendl, J.; Rieger, J.; Kaessmeyer, S. (2021):
Influence of age and breed on bovine ovarian capillary blood supply, ovarian mitochondria and telomere length.
Cells; 10(10), S. Artikel 2661
www.mdpi.com/2073-4409/10/10/2661

5. Gruber, C.; Dilly, M.; Bahramsoltani, M.; Kleinsorgen, C.; Engelskirchen, S.; Ramspott, S.; Ehlers, J. P. (2021):
Communication as teaching content of veterinary studies: a joint position paper from the DVG specialist group "communication and didactics" and the GMA veterinary medicine committee.
GMS journal for medical education; 38(4), S. Doc84
www.egms.de/static/en/journals/zma/2021-38/zma001480.shtml

6. Voltolini Velho, R.; Halben, N.; Chekerov, R.; Keye, J.; Plendl, J.; Sehouli, J.; Mechsner, S. (2021):
Functional changes of immune cells: signal of immune tolerance of the ectopic lesions in endometriosis?
Reproductive biomedicine online; 43(2), S. 319–328
www.sciencedirect.com/science/article/pii/S1472648321001887

7. Corte, G. M.; Humpenöder, M.; Pfützner, M.; Merle, R.; Wiegard, M.; Hohlbaum, K.; Richardson, K.; Thöne-Reineke, C.; Plendl, J. (2021):
Anatomical evaluation of rat and mouse simulators for laboratory animal science courses.
Animals; 11(12), S. Artikel 3432
www.mdpi.com/2076-2615/11/12/3432

8. Humpenöder, M.; Corte, G. M.; Pfützner, M.; Wiegard, M.; Merle, R.; Hohlbaum, K.; Erickson, N. A.; Plendl, J.; Thöne-Reineke, C. (2021):
Alternatives in education: evaluation of rat simulators in laboratory animal training courses from participants' perspective.
Animals; 11(12), S. Artikel 3462
www.mdpi.com/2076-2615/11/12/3462

9. Humpenöder, M.; Corte, G. M.; Pfützner, M.; Wiegard, M.; Merle, R.; Hohlbaum, K.; Erickson, N. A.; Plendl, J.; Thöne-Reineke, C. (2021):
Alternatives in education: rat and mouse simulators evaluated from course trainers' and supervisors' perspective.
Animals; 11(7), S. Artikel 1848
www.mdpi.com/2076-2615/11/7/1848

10. Pohl, A.; Klass, L. G.; Kleinsorgen, C.; Bernigau, D.; Pfeiffer-Morhenn, B.; Arnhold, S.; Dilly, M.; Beitz-Radzio, C.; Wissing, S.; Vogt, L.; Bahramsoltani, M. (2021):
Integration and potential of teaching communication skills in the study of veterinary medicine in Germany.
GMS journal for medical education; 38(3), S. Doc53
www.egms.de/static/en/journals/zma/2021-38/zma001449.shtml

11. Fulde, M.; van Vorst, K.; Zhang, K.; Westermann, A. J.; Busche, T.; Huei, Y. C.; Welitschanski, K.; Froh, I.; Pägelow, D.; Plendl, J.; Pfarrer, C.; Kalinowski, J.; Vogel, J.; Valentin-Weigand, P.; Hensel, M.; Tedin, K.; Repnik, U.; Hornef, M. W. (2021):
SPI2 T3SS effectors facilitate enterocyte apical to basolateral transmigration of Salmonella-containing vacuoles in vivo.
Gut microbes; 13(1), S. Article: 1973836
www.tandfonline.com/doi/full/10.1080/19490976.2021.1973836

Institute of Veterinary Physiology (WE02)

12. Bauer, A.; Martens, H.; Thöne-Reineke, C. (2021):
Tierschutzrelevante Zuchtprobleme beim Milchvieh: Interaktion zwischen dem Zuchtziel „Milchleistung“ und dem vermehrten Auftreten von Produktionskrankheiten.
Berliner und Münchener tierärztliche Wochenschrift; **134**(6), S. 1–9
www.vetline.de/tierschutzrelevante-zuchtprobleme-beim-milchvieh-interaktion-zwischen-dem-zuchtziel-milchleistung

13. Ott, D.; Schrapers, K. T.; Aschenbach, J. R. (2021):
Changes in the relationship between ionized and total calcium in clinically healthy dairy cows in the period around calving.
Animals; **11**(4), S. Artikel 1036
www.mdpi.com/2076-2615/11/4/1036

14. Stumpff, F.; Manneck, D.; Martens, H. (2021):
News in caecal signalling: the role of propionate in microbial-epithelial crosstalk.
Pflügers Archiv: European journal of physiology; **473**(6), S. 853–854
link.springer.com/article/10.1007/s00424-021-02579-2

15. Bekusova, V.; Droessler, L.; Amasheh, S.; Markov, A. G. (2021):
Effects of 1,2-dimethylhydrazine on barrier properties of rat large intestine and IPEC-J2 cells.
International journal of molecular sciences; **22**(19), S. Artikel 10278
www.mdpi.com/1422-0067/22/19/10278

16. Droessler, L.; Cornelius, V.; Markov, A. G.; Amasheh, S. (2021):
Tumor necrosis factor alpha effects on the porcine intestinal epithelial barrier include enhanced expression of TNF receptor 1
International journal of molecular sciences; **22**(16), S. Artikel 8746
www.mdpi.com/1422-0067/22/16/8746

17. Haase, S.; Sommerer, M.; Kirstein, J.; Nordmeier, V. (2021):
tet.folio: eine Online-Plattform für die Produktion innovativer Lehr-Lern-Angebote.
PhyDid B, Didaktik der Physik, Beiträge zur DPG-Frühjahrstagung, S. 389–394
www.phydid.de/index.php/phydid-b/article/view/1117

18. Manneck, D.; Braun, H.-S.; Schrapers, K. T.; Stumpff, F. (2021):
TRPV3 and TRPV4 as candidate proteins for intestinal ammonium absorption.
Acta physiologica; **233**(1), S. Artikel e13694
onlinelibrary.wiley.com/doi/10.1111/apha.13694

19. Geiger, S.; Patra, A. K.; Schrapers, K. T.; Braun, H. S.; Aschenbach, J. R. (2021):
Menthol stimulates calcium absorption in the rumen but not in the jejunum of sheep.
Journal of dairy science; **104**(3), S. 3067–3081
www.sciencedirect.com/science/article/abs/pii/S002203022031095X

20. Liebe, H.; Liebe, F.; Sponder, G.; Hedtrich, S.; Stumpff, F. (2021):
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German Veterinary Medical Licensure Law

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Non-official translation

Preamble

Pursuant to the first sentence of Section 5 of the German Federal Veterinary Regulations (Bundes-Tierärzteordnung) in the version published on 20 November 1981 (German Federal Legal Gazette (BGBl.) I p. 1193), last amended by Article 151 of the act of 25 November 2003 ((BGBl. I p. 2304) in conjunction with Section 1 (2) of the German Jurisdiction Reassignment Act (Zuständigkeitsanpassungsgesetz) of 16 August 2002 (BGBl. I p. 3165) and the Organisational Decree of 22 November 2005 (BGBl. I p. 3197), the German Federal Ministry of Health decrees:

Chapter 1 Veterinary Training

Section 1 Aims and Structure of Veterinary Training

(1) The aim of the training is to give students the scientific and practical training necessary to practice veterinary medicine independently and on their own responsibility as defined in Section 1 of the German Federal Veterinary Regulations, as to pursue advanced training and continuous professional development. This should include

1. fundamental veterinary, scientific, interdisciplinary and methodological knowledge,
2. practical skills,
3. intellectual and ethical principles and
4. the professional attitude of commitment to the well-being of people, animals and the environment that are required to practice the entire scope of the veterinary profession in a responsible manner, with particular attention to quality assurance.

(2) Veterinary training includes

1. a theoretical course on veterinary medicine lasting four and a half years with 3,850 hours of compulsory and elective courses, which may not be exceeded, at a university or at an equivalent institution of higher education at which the basic knowledge necessary for later application in the field of veterinary medicine is taught, including references to domestic and European law;
2. a practical study component of 1,170 hours, consisting of
    a) 70 hours on agriculture, animal breeding and animal husbandry,
    b) 150 hours in the curative practice of a veterinarian or in a veterinary clinic run by a veterinarian,
    c) 75 hours in hygiene control and food monitoring and inspection,
    d) 100 hours in abattoir animal and meat inspection,
    e) 75 hours in public veterinary practice,
    f) 700 hours in curative veterinary practice, in a veterinary clinic under veterinary supervision or in an elective internship;
3. the following examinations:
    a) Pre-Clinical Veterinary Examination,
    b) Clinical Veterinary Examination.

The standard period of study for full training within the meaning of Section 10 (2) of the German University Framework Act (Hochschulrahmengesetz) is five years and six months.

(3) Veterinary training also ensures the acquisition of the knowledge and skills referred to in Article 38 (3) of Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications (OJ L 255 of 30 September 2005, p. 22) as amended.

Section 2 Teaching Activities

(1) The university shall provide teaching that corresponds to the objectives stated in Section 1 (1) and enables students to acquire the knowledge and skills required in the examinations provided for in this regulation. The teaching of the scientific and theoretical basics should focus on teaching content relevant to veterinary medicine. Teaching must link theoretical and clinical knowledge as much as possible. For this purpose, the University conducts lectures, seminars, clinical demonstrations and exercises, including exercises on animals, in the subjects listed in Annex 1. It can replace parts of these courses with suitable interactive learning programmes. The number of students in the seminars, clinical demonstrations and exercises is determined by the universities based on the educational task. Course content should not be tailored to individual fields, but should be problem-oriented and interdisciplinary, to the extent that this is possible and appropriate. Interdisciplinary teaching must be performed and

coordinated with the involvement of several field representatives. The University's Study Regulations regulate further details.

(2) During their studies, students must take part in at least the courses listed in the fourth sentence of paragraph 1 above, which are designated by the university as compulsory. Compulsory and elective courses, excluding clinical training and internships, should amount to an average of 30 hours per week in the semester. They must contain the fields listed in Annex 1 and the number of hours.

(3) The University must offer elective courses in the subjects listed in Annex 1, in which students must participate for at least 308 hours from the first to the ninth semester, including at least 84 hours in the fields of the Anatomical-Physiological section of the Pre-Clinical Veterinary Examination and at least 126 hours in the Clinical Veterinary Examination subjects.

(4) Students must take part in the compulsory “Interdisciplinary Teaching” course.

Section 3 Testing Clause

(1) If the total number of hours of the theoretical study part is kept at 3,850 hours, the universities may, subject to paragraph 2 below, provide for deviations in the number of hours for the subjects listed in Annex 1 of up to 20 per cent of the total number of hours.

(2) Subjects with 28 hours or less and the subjects listed in Annex 1 (28 to 31) are excluded from the option to reduce hours.

(3) The deviations according to (1) require that
1. the training objectives according to Section 1 (1), as the basis for the approval according to Section 4 (1) of the German Federal Veterinary Regulations, are not jeopardised,
2. it is ensured that the requirements of Article 38 of Directive 2005/36/EC are met,
3. the conditions under which the University can reverse the deviations are regulated,
4. it remains possible for students to change universities.

(4) Universities that make use of the deviation in accordance with (1) must notify the responsible authority of this with a description of the testing objective and the expected qualitative improvements for veterinary training. At the request of the responsible authority, they must submit a report on the experience gained.

Section 4 Model Course

(1) In order to test new models of veterinary training, the responsible authority can, at the request of a university, introduce a model course of study that deviates from the standard course of study and determine their respective content. The training objectives stated in Section 1 (1) and (3) must be retained.

(2) Approval for a model course of study requires that:
1. the test objective is described and shows the expected qualitative improvements for veterinary training from the model course of study,
2. a special study regulation are issued by the university,
3. it is ensured that the knowledge, skills and abilities to be demonstrated in the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination are tested in the model course of study in a manner equivalent to the standard course of study,
4. an appropriate accompanying and final assessment of the model course of study are guaranteed by the university using external expertise,
5. the minimum and maximum duration of the model course of study are set and applications for extension are justified based on assessment results,
6. the conditions under which the university can cancel the model course of study are stated,
7. regulations are in place governing the transition from the model course of study to the standard course of study with regard to further study, the recognition of study periods and examinations and other educational achievements, and
8. information is provided as to how the requirements of the standard course of study for the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination in the model course are met.

Chapter 2
Examination Regulations
Subchapter 1
General Provisions

Section 5 Examination Boards

(1) Each university establishes a state Examination Board for the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination.

(2) Each Examination Board consists of the chairperson, one or more deputies and one or more other members. After consulting with the university, Examination Board members are appointed in writing as examiners for a period of no more than four years by the responsible authority for specific examination subject areas. Professors of the university shall be appointed as chairpersons and deputies, and professors or other teachers of the examination subject areas shall be appointed as other members.

(3) The chairperson of the Examination Board is responsible for the supervision and proper implementation of examinations. The chairperson ensures that students who meet all the requirements for admission to the examination can take initial examinations in the respective examination subject areas by the deadlines specified by the university. In urgent cases, the chairperson may, with the consent of the responsible authority, appoint a teacher to temporarily oversee examinations.

Section 6 Responsible Examination Board

Students take sections of the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination in the presence of the responsible Examination Board at the university where they are enrolled or were last enrolled at the time of registration for the examination in the veterinary medicine course. Repeat examinations should be taken before the Examination Board before which the initial examination was taken.

Section 7 Reporting for Examination

(1) An application must be sent to the chairperson of the Examination Board according to Sections 19 and 22 for admission to Pre-Clinical Veterinary Examination and according to Section 29 for the Clinical Veterinary Examination. The application must be accompanied by:

1. ID card,
2. proof of university entrance qualifications, and in the case of certificates that were acquired outside the scope of this Regulation, also the certificate of recognition from the responsible authority and
3. the required certificates in accordance with Sections 20, 23 and 31.

The evidence according to point 1 and point 2 of the second sentence only needs to be presented before the first examination at a university.

(2) Evidence must be submitted in the original or an officially certified copy. Evidence can be presented in another form, provided that the chairperson of the Examination Board recognises this as equivalent in the individual case. The evidence will be kept in the examination files until the relevant part of the examination has been completed and then will be returned.

Section 8 Admission to Examinations

(1) The chairperson decides on admission to the examinations for the Examination Board.

(2) Admission must be refused if a student does not provide the required evidence or is not allowed to repeat an examination in accordance with the third sentence in Section 17 (1).

(3) After admission to the examination, the examinations must be taken before the deadlines specified by the university.

Section 9 Conduct of Examinations

(1) Examinations must be conducted by the members of the Examination Board appointed or recruited for the relevant examination subject areas. They can also be conducted by several examiners.

(2) The chairperson or their deputy can participate in the examinations and ask examination questions.

(3) The responsible authority can send observers to the oral examinations. The chairperson of the Examination Board must, after prior notification, allow up to five veterinary medicine students who have already been admitted

to the same examination or who are in the training phase preceding the examination in question, and a representative of the competent veterinary association, to be present as observers at the examination, with the exception of the consultation and announcement of the examination result, unless a candidate objects.

Section 10 Examination Format

(1) The examination can be in written, electronic, oral, single/multiple choice format or a combination of these. The university can also determine the examination grade through within-term tests; the provision of evidence of regular and successful participation in seminars and tasks remains unaffected. In individual examination subject areas, the examination can be split into separate parts.

(2) At least two, but not more than five, students should be examined together in the oral examination.

(3) If students provide a doctor's letter that credibly proves that they are unable to take the examination in full or in part in the intended form due to a physical restriction, the chairperson must allow equivalent successful completion of an examination of equal quality to be carried out in a different form.

(4) The university shall determine the form of examination for the respective examination subject area in accordance with paragraph 1 above and the necessary deviations from Sections 9, 11, 12 and 14 in a Supplementary Examination Regulation (Section 16 of the University Framework Act).

Section 11 Examination Date

(1) Examinations must be conducted promptly after teaching activities. They should be held during the lecture-free periods and should generally be completed by the start of the next lecture period, with the exception of repeat examinations. The chairperson sets the examination dates in consultation with the examiners involved. Examinations must be scheduled in such a way that the standard period of study in accordance with the second sentence of Section 1 (2) is not exceeded.

(2) The time during which the students concerned do not have to complete any compulsory courses or internships is considered to be a lecture-free period.

Section 12 Invitation to Examination, Failure to Attend

(1) Students must be invited to examinations no later than seven days before the examination date. Invitations must be delivered to candidates directly.

(2) If a student fails to attend an examination or misses the deadline for submitting a written report of findings without adequate justification, the student must be invited to a new examination, which will not be considered a repeat examination or a new deadline must be set for them. The reason for the failure to attend or to meet a deadline must be communicated to the chairperson immediately in writing and evidence must be provided upon request. If the student fails to attend or to meet a deadline due to illness, the student must submit a doctor’s letter. The chairperson may request submission of a certificate from a health authority. Students’ performance in the examination in question is considered “insufficient” if the reason for failure to attend is not sufficient.

(3) Paragraph 2 applies accordingly if a student cancels or withdraws from an examination.

(4) Students who have not reported for an examination without a valid reason for up to one academic year after the earliest possible date, or six months before the last possible date will be summoned to mandatory counselling by the chairperson of the Examination Board.

Section 13 Aim of the Examination Process

(1) The examination must establish whether the students have acquired the knowledge and skills they need to continue their studies and to practice the veterinary profession. The examination must also establish whether the students understand how to theoretically and practically apply the basic knowledge demonstrated in previous examination sections and whether they have mastered the common technical terms.

(2) If a patient or another examination subject area on which the students are to be examined is not available, the examiner will decide how the examination will be performed, if necessary on a phantom or model.

Section 14 Assessment of examination performance

(1) The examiner or a secretary appointed by the chairperson prepares a record of the oral examination in accordance with the template in Annex 2, which shows the subject of the examination and the assessment of the performance. Examination performance is assessed by the examiners using the following examination grades:

1. "very good" (1) = an excellent performance,
2. "good" (2) = a performance that is significantly above average requirements,
3. "satisfactory" (3) = a performance that meets average requirements in every respect,
4. "sufficient" (4) = a performance that, despite its deficiencies, still meets the requirements,
5. "not sufficient" (5) = a performance that, due to the number of deficiencies, no longer meets the requirements.

Subject to Section 15, an examination grade of "not sufficient" may only be awarded for an oral examination if the students have been examined for at least 20 minutes. It must be clearly justified in the transcript.

(2) The university specifies a binding assessment framework before written or electronic multiple-choice examinations.

(3) The examination results for an examination subject area must be announced to students after completion of the examination in this subject.

Section 15 Irregularities

If a student disrupts the orderly conduct of examination or attempt to cheat, the examiner can cancel the examination for this student. The chairperson, in consultation with the examiners involved, can declare the performance of this student in the examination in question to be "insufficient" or, in particularly serious cases, to declare the examination section "failed". The fourth sentence of Section 14 (1) applies accordingly to the decision to cancel an examination according to the first sentence or the declaration according to the second sentence.

Section 16 Examination Results

(1) The chairperson determines the examination results and issues the certificates in accordance with Annexes 3 to 5. The certificates list the examination grades for the examination subject areas and the overall results after the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination have been passed. Examinations recognised in accordance with Section 65 must be specifically noted on the certificates.

(2) An examination subject area is considered passed if a student has received the examination grade "sufficient" or higher.

(3) The Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination are passed if the students have passed all examination subject areas.

(4) The overall result of the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination is determined from the average of the examination grades achieved for the subjects in the examinations. The average grade must be calculated to two decimal places; the third decimal place is not taken into account. The overall grade is:

1. "very good": a numerical value of up to 1.49
2. "good": a numerical value of 1.50 to 2.49
3. "satisfactory": a numerical value of 2.50 to 3.49
4. "sufficient": a numerical value of 3.50 to 4.00.

(5) A certificate in accordance with the model in Annex 4 is issued for passing the Pre-Clinical Veterinary Examination and a certificate in accordance with the model in Annex 5 is issued for passing the Clinical Veterinary Examination, in which the numerical value must be stated in brackets in addition to the overall result. If students have not passed the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination, an overall result will not be determined; if examinations have been taken into account in accordance with Section 65, an overall result will not be determined unless the chairperson of the Examination Board determines that the other examination grades achieved allow a meaningful overall result to be determined.

Section 17 Repetition of Examinations

(1) Students can repeat an examination for a failed examination subject area twice. Section 20 (2) remains unaffected. If a subject area is not passed after two repetitions, the chairperson declares the examination to have been failed. Further repetition is not possible, even after another course in veterinary medicine. The chairperson must inform the other universities and the bodies responsible for recognising study achievements about this.

(2) Repeat examination may not be carried out until three weeks after the unsuccessful examination.

(3) In the case of oral examinations, in addition to the examiner, the chairperson or a Board member designated by the chairperson must be present at the first and second repeat examination; they can also ask examination questions. In the case of written or electronic examinations, the work of the second repeat examination is also evaluated by the chairperson or a Board member designated by the chairperson, in addition to the examiner. At the request of the student in accordance with the Supplementary Examination Regulations, the second sentence also applies to the first repeat examination.

Section 18 Communication of Examination Results

After completing the veterinary examination, the chairperson informs the responsible body of the names of the students and the examination results.

Subchapter 2
Natural Sciences Part of the Pre-Clinical Veterinary Examination (Vorphysikum)

Section 19 Examination Subject Areas

The pre-clinical course (Vorphysikum) includes the examination subject areas

1. Physics including Basics of Physical Radiation Protection,
2. Chemistry,
3. Zoology and
4. Botany of Feeding, Toxic and Healing Plants

The examinations are taken by the end of the first year of study.

Section 20 Prerequisites

(1) The following certificates are required for admission to examinations:

1. Certificate of regular and successful participation in the seminars or exercises specified for the examination subject area by the university in
    a) Physics including Basics of Physical Radiation Protection,
    b) Chemistry,
    c) Zoology and
    d) Botany of Feeding, Toxic and Healing Plants
2. Certificate of regular and successful participation in a medical terminology course of the university or a course recognised as equivalent by the chairperson of the Examination Board; this certificate can be replaced by proof of knowledge of Latin or Greek in accordance with the Resolution of the Conference of Ministers of Education and Cultural Affairs of 26 October 1979 (Joint Ministerial Gazette (GMBl) 1980 p. 642).

(2) The university can offer students the opportunity to prove that they have sufficient knowledge of the subjects listed in (1) (1) (a)-(d) in an oral examination within the first month after the start of the first semester of study. Proof of sufficient knowledge in one or more of these subjects in accordance with Section 21 is deemed to be a passed examination within the meaning of Section 19 and evidence within the meaning of the first sentence. If the examination is not passed in one or more subjects in accordance with the first sentence, the examination is deemed to have not been taken.

Section 21 Examination Content

The examinations in the examination subject areas Physics including Basics of Physical Radiation Protection, Chemistry, Zoology and Botany of Feeding, Toxic and Healing Plants cover the basic knowledge essential for the understanding of scientific processes and for later application in the veterinary field.

Subchapter 3
Anatomical-Physiological Part of the Pre-Clinical Veterinary Examination (Physikum)

Section 22 Examination Subject Areas

The Physikum includes the examination subject areas

1. Anatomy,
2. Histology and Embryology,
3. Physiology,
4. Biochemistry and
5. Animal Breeding and Genetics including Animal Classification.

The examinations should be taken by the end of the second year of study.

Section 23 Prerequisites

(1) The following certificates are required for admission to examinations:

1. Certificate confirming that the Vorphysikum was passed no more than one and a half years ago;
2. Certificate of regular and successful participation in the seminars or exercises specified for the respective examination subject area by the university in
    a. Anatomy,
    b. Histology,
    c. Embryology,
    d. Physiology,
    e. Biochemistry and
    f. Animal Breeding and Genetics including Animal Classification;
3. Certificate from the university of a 70-hour task within two consecutive weeks on agriculture, animal breeding and animal husbandry on a teaching property;
4. Certificate from the university of regular and successful participation of at least 84 hours in elective courses in subjects according to Paragraph 1 (2).

(2) The requirement according to Paragraph 1 (3) is also considered to be met if a completed agricultural course, a four-week agricultural internship at a recognised training site or other comparable training recognised by the university has been completed.

Section 24 Anatomy

In the examination subject area Anatomy, students must explain the contents of a body cavity in full or in part, remove it if necessary and discuss one topic of each of the musculoskeletal system and of the organs or organ systems using existing or to-be-made specimens.

Section 25 Histology and Embryology

In the examination subject area Histology and Embryology, students must demonstrate their knowledge of cell, tissue and organ theory using microscopic-anatomical specimens and general and special development theory.

Section 26 Physiology

In the examination subject area Physiology, students must solve or evaluate a task in the field of physiology, explain it and demonstrate their knowledge of the physiological basis of life processes and the normal functioning of individual organ systems and their regulation in the organism as a whole. Nutritional physiology must be taken into account.

Section 27 Biochemistry

In the examination subject area Biochemistry, students must solve or evaluate a task and explain it and demonstrate their knowledge of the biochemical and molecular biological basis of life processes and their regulation. The special aspects of the intermediate metabolism in domestic animals and livestock and the biochemistry of the diet must be taken into account.

Section 28 Animal Breeding and Genetics including Animal Assessment

In the examination subject area Animal Breeding and Genetics including Animal Classification, students must assess a pet in terms of its utility or breeding value and prove that they have acquired sufficient knowledge of genetics and the breeding of domestic animals and animal breeding law.

Subchapter 4
Clinical Veterinary Examination

Section 29 Examination Subject Areas

The Clinical Veterinary Examination includes examinations in the following subjects:

1. Animal Husbandry and Animal Hygiene,
2. Animal Welfare and Ethology,
3. Animal Nutrition
4. Clinical Propaedeutics,
5. Virology,
6. Bacteriology and Mycology,
7. Parasitology,
8. Animal Disease (Outbreak) Control and Infection Epidemiology,
9. Pharmacology and Toxicology,

10. Drug and Narcotic Substance Legislation,
11. Avian Diseases,
12. Radiology,
13. General and Special Pathological Anatomy and Histology,
14. Food Science including Food Hygiene,
15. Meat Hygiene,
16. Dairy Science,
17. Reproductive Medicine,
18. Internal Medicine,
19. Surgery and Anaesthesiology and
20. Forensic Veterinary Medicine, Professional Regulations and Professional Conduct.

Section 30 Special Regulations for Final Examinations

Examinations in the following subjects may not be completed before the end of the eighth semester: General and Special Pathological Anatomy and Histology, Food Hygiene, Meat Hygiene, Dairy Hygiene, Internal Medicine, Surgery and Anaesthesiology, Reproductive Medicine and Forensic Veterinary Medicine, Professional Regulations and Professional Conduct.

Section 31 Certificates

(1) The following certificates are required for admission to examinations:
1. Pre-Clinical Veterinary Examination Certificate;
2. Certificates of regular and successful participation in the seminars or exercises specified for the respective Clinical Examination subject area by the university.
3. Certificate of participation in a practical part of the course required for the respective examination subject area in accordance with Sections 54 to 62, or other comparable substitute training recognised by the university.

(2) Before completing the examinations in accordance with Section 30, the following evidence is also required:
1. Certificate of regular and successful participation in courses in Biometrics, Animal Feed Science, Immunology,
2. Certificate of the study of veterinary medicine for at least five and a half years, of which at least three years take place after successful completion of the Pre-Clinical Veterinary Examination and
3. Certificate of regular and successful participation in at least 224 hours of elective courses, whereby hours from elective courses described in Section 23 (1) (4) are not taken into account.

Subchapter 5
Course Content and Subjects

Section 32 Animal Husbandry and Animal Hygiene

The examination on Animal Husbandry and Animal Hygiene covers the keeping and care of domestic animals and livestock and the importance of environmental influences on animal health and yield and the effects of animal husbandry, including the administration of medicines, on the environment. For animals used to produce food, the impact of keeping them, including the administration of medicines, on the quality of the food produced must be taken into account.

Section 33 Animal Welfare and Ethology

In the examination subject area Animal Protection and Ethology, students must prove their knowledge of the species- and behaviour-appropriate accommodation and care of animals and the protection of animals in the livestock trade, during animal transport, during slaughter or killing and in animal experiments, and their knowledge of animal protection regulations with their ethical aspects and scientific principles and in ethology.

Section 34 Animal Nutrition

The examination in the subject of Animal Nutrition covers nutrition with particular consideration of the pathogenesis of nutritionally-related diseases, reduced fertility and performance, the environmentally relevant effects of feeding, including the possible introduction of undesirable substances into foods of animal origin, and the basics of dietetics with particular consideration of feed science and the feed law regulations that are important for veterinary purposes.

Section 35 Clinical Propaedeutics

In the examination subject area Clinical Propaedeutics, students must examine an animal and prove that they are familiar with the basics of clinical examination methods.

Section 36 Virology

In the examination subject area Virology, students must demonstrate their knowledge of key viruses in veterinary medicine, the aetiology, course, diagnosis, prevention and control of the diseases they cause in animals, as well as their importance for human health. Questions of immunology, epidemiology and animal disease theory must be taken into account.

Section 37 Bacteriology and Mycology

In the examination subject Bacteriology and Mycology, students must prepare a microbiological preparation, examine it, discuss it and demonstrate their knowledge of the key bacteria and fungi in veterinary medicine, the aetiology, course, diagnosis, prevention and control of the diseases they cause in animals and about their importance for human health. Questions of immunology, epidemiology and animal disease theory must be taken into account.

Section 38 Parasitology

In the examination subject area Parasitology, students must prepare a parasitological specimen, examine it, discuss it and demonstrate their knowledge of the biology of animal parasites and the detection, progression, control and prevention of parasitic diseases and the meaning of animal parasites for human health. Questions of immunology, epidemiology and animal disease theory must be taken into account.

Section 39 Animal Disease (Outbreak) Control and Infection Epidemiology

In the examination subject area Animal Disease Control and Infection Epidemiology, students must demonstrate knowledge of the general principles of the causes, spread, control and economic effects of animal diseases, including their prophylaxis, the basics of infection epidemiology and the requirements of national and European animal health law, including laws on the disposal of animal by-products.

Section 40 Pharmacology and Toxicology

The examination subject area Pharmacology and Toxicology primarily covers the effects and interactions of drugs and other active substances in healthy and diseased organisms, basic knowledge of the therapeutic use of such substances and the associated risks for animals and humans, including the risks of possible development of resistance, and pharmacokinetics with special consideration of species-specific biotransformation and the excretion of such substances by the animal body. The corresponding effects and properties of poisons and environmental contaminants in healthy or sick organisms and the therapy of acute and chronic poisoning must also be taken into account.

Section 41 Drug and Narcotic Substance Legislation

In the examination subject area Drug and Narcotic Substance Legislation, students must prove that they can select and prescribe suitable medicines for at least three clinical pictures and that they have knowledge of the principles of determining maximum residue levels and deriving waiting times. They must also prepare two medicines according to a prescription and calculate a fee for them in accordance with the regulations applicable to medicine prices. In addition, students must demonstrate their knowledge of the relevant laws regarding the circulation of pharmaceuticals and narcotics and the laws and measures to prevent residues in foods of animal origin.

Section 42 Avian Diseases

In the examination subject area Avian Diseases, students must demonstrate their knowledge of the aetiology, pathogenesis, diagnosis, prophylaxis and therapy of diseases of commercial poultry, wild, domestic and zoo birds, with particular attention to husbandry and feeding with regard to the development and treatment of diseases.

Section 43 Radiology

(1) The examination subject area of Radiology covers:

1. the properties and effects of ionising radiation,
2. the basics of radiobiology,
3. the effects of ionising radiation on people, animals, food, feed and the environment,
4. methods for detecting radiation effects and for determining doses for employees and animal carers,
5. detection methods for contamination with radioactive substances,
6. physical and technical principles and basic approaches of imaging diagnostic procedures including the description of alternatives to the use of ionising radiation,
7. basics of radiation therapy, and
8. the legal, practical and technical radiation protection of employees and those caring for animals (examination content from numbers 4 to 8 of the basic course in radiation protection according to Annex 1 of the Radiation Protection in Veterinary Medicine Guidelines; GMBl 2005 p. 666).

(2) A successfully passed examination in accordance with paragraph 1 is recognised as a basic course in radiation protection in accordance with Annex 1 of the Radiation Protection in Veterinary Medicine Guidelines if the responsible body has previously determined that the requirements (course content from Annex 1 of the Radiation Protection in Veterinary Medicine Guidelines) are met.

(3) The acquisition of expertise in the field of X-ray diagnostics can only begin after the student successfully passes an examination on Radiology during clinical training which is based on the requirements of the Radiation Protection in Veterinary Medicine Guidelines.

Section 44 General and Special Pathological Anatomy and Histology

In the examination subject area General and Special Pathological Anatomy and Histology, students must prove that they have acquired basic knowledge about the origins and progression, characteristics and naming of pathological processes. They also have to identify and explain pathological-histological specimens, perform an autopsy on an animal body or examine an organ or several organs, explain and record the findings, and demonstrate their knowledge of detectable disease processes and their pathogenesis.

Section 45 Food Science including Food Hygiene

In the examination subject area Food Science including Food Hygiene, students must examine a food of animal origin (not milk or milk products), assess its nature, composition and marketability and record the findings. They must demonstrate their knowledge of their importance of food of animal origin for human nutrition, how it is obtained, production and treatment technology and its quality in microbiological, chemical and other terms. Hygiene and health-relevant aspects of quality must be given particular focus. Students must also demonstrate knowledge of the influences on food safety and quality at all stages of the food chain and the animals used for food production, including quality assurance measures, residue assessment and the relevant food laws. In addition, students must demonstrate that they can diagnose and classify the possible causes of errors and defects, the dangers and the possible risks that can occur at all stages of the food chain as part of a science-based risk analysis and take appropriate control and corrective measures.

Section 46 Meat Hygiene

In the examination subject area Meat Hygiene, students must examine a live slaughtered animal and a slaughtered animal in its slaughtered state or parts of a slaughtered animal or a hunted furred game animal in accordance with the applicable laws, comment on the suitability of the meat for human consumption, and to record the findings and assessments. They must also demonstrate their knowledge of the hygienic production and treatment of meat, the scientific findings underlying slaughter animal and meat inspection and the specific, basic legal principles regarding meat hygiene and the basic principles of slaughterhouse theory. In particular, they must demonstrate their knowledge of the principles, concepts and methods of good manufacturing practice, quality management, risk analysis on a scientific basis and a system of critical control points (HACCP procedures; Hazard Analysis Critical Control Point) and verify and evaluate this using case studies. The prevention and containment of food-related threats to human health and methods of epidemiology and monitoring and surveillance systems must also be addressed.

Section 47 Dairy Science

In the examination subject area Dairy Science, students must examine and evaluate a milk sample (fresh, raw or treated milk sample) or a milk product and prepare a written test report. They must also demonstrate knowledge of the physiology and pathology of milk production, the hygiene and technology of milk production and processing as well as the hygienic and health-related aspects, in particular the microbiological, qualitative influences in the production, processing and marketing of milk and milk products, including quality assurance measures and the relevant legal provisions.

Section 48 Reproductive Medicine

In the examination subject area Reproductive Medicine, students must examine an animal for sexual health or a newborn pet, make a diagnosis using physical and laboratory diagnostic methods, assess the expected course of treatment, draw up and explain a therapeutic plan, and initiate or perform treatment if necessary and prepare a written report of findings. They must also demonstrate their knowledge of gynaecology, including diseases of the mammary gland, obstetrics, including neonatal studies and obstetric surgery, normal reproduction and its disorders in male domestic animals, and breeding hygiene, artificial insemination and other biotechnical measures including herd care.

Section 49 Internal Medicine

In the examination subject area Internal Medicine, students must examine one or several animals suffering from an internal or skin disease, make a diagnosis using physical and laboratory diagnostic methods, assess the likely course of the disease, draw up and explain a therapeutic plan, and initiate or perform treatment if necessary and prepare a written report of findings on an examined animal. They must also demonstrate their knowledge of internal and skin diseases in animals, taking into account general and special therapy and herd care.

Section 50 Surgery and Anaesthesiology

In the examination subject area Surgery and Anaesthesiology, students must examine one or several animals requiring surgery, make a diagnosis, if necessary using physical and laboratory diagnostic methods, assess the likely course of the disease, draw up and explain a therapeutic plan, if necessary Initiate or perform treatment and prepare a written report of findings on one of the animals to be examined. They must perform one or more surgical procedures on a living or dead animal, including the necessary anaesthesiology. They must also demonstrate their knowledge of surgery and anaesthesiology and, in particular, eye diseases, dentistry, hoof and mouth diseases and hoof and shoeing theory.

Section 51 Forensic Veterinary Medicine, Professional Regulations and Professional Conduct.

In the examination subject area Forensic Veterinary Medicine, Professional Regulations and Professional Conduct., students must demonstrate their knowledge of contract law and its effects on the purchase of animals and veterinary purchase examinations and demonstrate knowledge of veterinary duties of care and liability law. In addition, they must demonstrate their knowledge of the provisions of liability law and criminal law that are important for the practice of the veterinary profession, its organisation and of veterinary professional law and conduct, including the legal requirements for running a practice.

Section 52 Animal Species Clinics

(1) In the examination subject areas described in Sections 48, 49 and 50, equines, ruminants, pigs, small animals and pets must be taken into account.

(2) At universities that have set up special clinics for certain animal species, examinations can be distributed according to the available clinics by decision of the Examination Board

Section 53 Interdisciplinary Teaching

In interdisciplinary teaching, students are introduced to practice-relevant content and tasks in the clinical treatment of domestic animals and livestock based on the knowledge acquired during previous and parallel studies. In particular, courses in internal medicine, reproductive medicine, livestock management and surgery involving pathological anatomy, clinical pharmacology, animal nutrition, animal breeding, animal husbandry, veterinary professional law, animal protection and ethology, topographic anatomy, epidemiology, infectious diseases and animal disease control, including options for preventing animal diseases must be presented in an interdisciplinary manner. Students should be given the opportunity to learn about and work on the development, diagnosis and treatment of diseases based on specific individual cases. The course content of clinical veterinary medicine and other subjects should focus particularly on the effects of ionising radiation or radioactive substances, the problem of residues and environmental contaminants and food, meat and milk hygiene, particularly in the areas of risk assessment, quality assurance and marketability of food obtained from animals at all stages of food production in an interdisciplinary manner. The possible effects of animal diseases and the consequences of their treatment on human health and the environment must also be taken into account. Students should also be informed of the possibilities for killing animals painlessly.

Chapter 3
The Practical Study Part

Section 54 Internships

The internships according to this section are held outside the lecture period and generally during full-time working hours throughout the working week in accordance with workload in the respective facilities. The time of completion is determined by the university.

Subchapter 1
Training in Control Activities, Methods and Techniques for the Food Sector, including the Inspection of Fresh Meat

Section 55 Training Centres, Duration

(1) The training in control activities, methods and techniques for the food sector, including the inspection of fresh meat, lasts 75 hours within at least two weeks, which should be consecutive. It takes place at an authority responsible for hygiene monitoring in slaughterhouses or food processing facilities or in departments responsible for monitoring the movement of food or food testing, in food industry facilities that control the quality and safety of food, or in relevant university facilities.

(2) Practical training in ante-mortem and meat inspection at an authority responsible for ante-mortem and meat inspection of beef or pigs in an abattoir lasts 100 hours. It must be completed within at least three consecutive weeks. In deviation from the second sentence, the training can be completed in two consecutive periods. Practical training in ante-mortem and meat inspection of poultry in an abattoir under an authority responsible for ante-mortem and meat inspection can be credited in accordance with the first sentence for a maximum of 30 hours.

(3) Activity as part of the training in accordance with paragraph 2 may only take place in companies that have a licence and in which full-time official veterinarians perform inspection work. Training can also be completed at more than one abattoir. If an abattoir at which training is performed only slaughters poultry, at least 70 hours of the training period in accordance with the first sentence of paragraph 2 must be completed in an abattoir with cattle or pigs. In this case, the second and third sentence of paragraph 2 do not apply.

Section 56 Learning Objectives

(1) During the training in accordance with Section 55 (1), students must, according to detailed instructions from full-time veterinarians or other qualified persons involved in control activities, food monitoring or testing in the companies or at the responsible authority or other institution, familiarise themselves with the assessment of the hygiene status of the premises and facilities and the methods for inspecting the hygiene status of facilities and to practice the assessment of processing and treatment technology. The training also includes inspection activities, methods and technologies for the food sector. Furthermore, students should have extensive practice and gain skills in monitoring or examining various foods in accordance with the range of tasks of the authority or other institution and be able to independently assess the marketability or industrial hygiene of a control object on a scientific basis. Aspects of food technology and quality assurance should also be taken into account.

(2) During the training in accordance with Section 55 (2), students must practice examining and assessing slaughtered animals and meat in accordance with detailed instructions from full-time veterinarians working for the authority responsible for slaughter animals and meat inspection. In addition, students must learn about the humane treatment of animals for slaughter.

(3) Students receive certificates in accordance with Annexes 6 and 7 for the training in accordance with Section 55 (1) and (2).

Subchapter 2
Training in Curative Veterinary Practice or in a Veterinary Clinic

Section 57 Training Centres, Duration

(1) The first part of the training, which can be completed in curative veterinary practice or in a veterinary clinic or half each in both facilities, lasts 150 hours within at least four weeks. It may not be completed before passing the Pre-Clinical Veterinary Examination.

(2) The second phase of the training, which can be completed in the curative veterinary practice or in a veterinary clinic or in a combination of no more than four such institutions, lasts 700 hours without prejudice to Section 60 and is to be completed within at least 16 weeks in accordance with the requirements of the university's study regulations.

(3) Obtaining a certificate of regular and successful participation in the lessons specified for the examination subject area of Radiology is a prerequisite for beginning the training in accordance with paragraph 2.

Section 58 Training in Curative Veterinary Practice

(1) Training in curative veterinary practice may only be supervised by veterinarians who:
1. have been practising independently for at least two years,
2. operate a veterinary pharmacy and
3. have not been prosecuted for practice-related issues in the two years before the start of the training.

(2) During the practical training in accordance with Section 57, students must participate in all areas of the relevant veterinary field of activity under the supervision, direction and responsibility of the practice owner.

(3) Students receive a certificate of their training in accordance with Annexes 8 and 9.

Section 59 Training in a Veterinary Clinic

(1) Training must be completed in the clinics of a university. It can also be completed in other veterinary-run clinics that are recognised as veterinary clinics by the competent veterinary association.

(2) During the training in accordance with (1), the students must contribute to the area of work of the relevant veterinary clinic under the supervision, direction and responsibility of the clinic management. In doing this, they are encouraged to develop their theoretical and scientific knowledge in the areas covered by the practical training.

(3) Students will receive a certificate of their training in accordance with Annex 10.

Subchapter 3
Elective Internship

Section 60 Training Centres, Duration

One part of the internship in accordance with Section 57 (2) of at least 75 hours within two weeks and a maximum of 350 hours within eight weeks can be completed
1. in an institute of a university in a scientific and medical field,
2. in a federal and state research institute performing scientific and medical tasks,
3. in a veterinary examination facility,
4. in a veterinary administration office,
5. at a state or state-funded animal health service, at an animal health office or at an insemination centre,
6. in the development, production and testing of medicines in the pharmaceutical industry, in the production and testing of foods of animal origin in the food industry, or in the production and testing of compound feed in the feed industry or
7. in scientifically managed zoological gardens.

Students receive a certificate of training in accordance with Annex 11.

Subchapter 4
Practical Training in a Public Veterinary Practice

Section 61 Training Centres, Duration

Practical training in the public veterinary sector lasts 75 hours over a period of at least two weeks, which should be consecutive. Training takes place in offices of the veterinary administration.

Section 62 Learning Objectives

(1) Practical training in the public veterinary sector in accordance with Section 61 is intended to give students the opportunity to deepen and expand knowledge and skills. Students should receive comprehensive training in the tasks of veterinary administration. They should also acquire knowledge of administrative and regulatory law and organisational and administrative knowledge.

(2) Students receive a certificate of the completed training in accordance with Annex 12.

Chapter 4
Approbation (Licence to Practise Veterinary Medicine)

Section 63 Application

(1) The application for a licence to practise as a veterinarian must be addressed to the responsible authority of the country in which the applicant passed the veterinary examination. The application must be accompanied by:

1. the identity card or, in the case of non-German citizens, passport or other proof of identity of the applicant,
2. a statement as to whether criminal proceedings or public prosecutor's investigations are pending against the applicant,
3. a medical certificate, which must be no older than one month, showing that the applicant is not unfit to practice the profession due to health reasons,
4. (deleted)
5. a criminal record check, which may not have been issued earlier than one month before presentation,
6. the veterinary examination certificate.

If an applicant who is not a national of one of the other member states of the European Union or of another signatory state to the Agreement on the European Economic Area, or of a signatory state to which Germany and the European Community or Germany and the European Union have granted a corresponding legal entitlement by treaty has been registered with the police in Germany for less than two years, the applicant must also enclose with the application a certificate in accordance with the first sentence of paragraph 3 or, if such a certificate cannot be provided, a declaration stating whether he/she has a criminal record in the state of his/her previous residence, whether criminal proceedings or a public prosecutor's investigation are pending against him/her there or whether he/she has been prohibited from practising the veterinary profession there on the basis of disciplinary or administrative measures.

(1a) If there are reasonable doubts about the identity of the applicant, in particular due to different names stated in the documents submitted, the applicant can also prove his/her identity by submitting a certified copy of the birth certificate or an extract from the parents' family register, or, if married, also the marriage certificate or an extract from the family register kept for the marriage.

(2) If a licence to practise medicine is to be granted in accordance with Section 4 (1), (1a), (2) or (3) or in accordance with Section 15a, also in conjunction with Section 16 of the German Federal Veterinary Regulations, the application must be sent to the responsible authority of the federal state in which the veterinary profession is to be practised. If the training did not take place in accordance with the provisions of these Regulations, the evidence in accordance with Section 4 (6) sentences 1, 2, 5 and 7 of the German Federal Veterinary Regulations must be submitted instead of the certificate in accordance with paragraph 1, sentence 2 (6). The responsible authority will confirm receipt of the documents to the applicant within one month and inform him/her if any documents are missing. If the certificates are not issued in German, they must also be submitted in a certified translation. The responsible authority may require the submission of further evidence, in particular regarding previous professional activity. In addition to the evidence to be submitted in accordance with the first sentence of Section 4 (1a) of the German Federal Veterinary Regulations, further evidence, in particular an activity report, can only be required if the Federal Veterinary Regulations provide for this or if special reasons require it.

(3) In the event that a certificate mentioned in the second sentence of paragraph 1 (5) cannot be presented, documents in accordance with Section 4 (6) (3) of the German Federal Veterinary Regulations can be submitted in its place. If the applicant has already practised the veterinary profession in their home member state, the competent authority responsible for issuing the licence to practise may, via the Federal Ministry of Food and Agriculture, obtain information from the competent authority of the home member state on any penalties or other professional or criminal sanctions imposed on the applicant for serious and clearly defined unethical conduct or criminal offences relating to the practice of the profession in the home member state. If, in the cases referred to in the first or second sentences, the competent authority responsible for issuing the licence has knowledge of facts which have occurred outside the scope of application of the German Federal Veterinary Regulations and which may be relevant with regard to the requirements of Section 4 (1) (2) of the German Federal Veterinary Regulations, it must inform the competent authority of the Member state of origin via the Federal Ministry of Food and Agriculture and notify it of the result and the conclusions it draws with regard to the certificates and evidence issued by it. The certificates and notifications mentioned in sentences 1 to 3 above must be handled confidentially. They may only be used as a basis for the assessment if they were issued no more than three months before the time of submission.

(4) In the event that a medical certificate referred to in sentence 2.3 of paragraph 1 cannot be presented, a corresponding certificate from the competent authority of the applicant's country of origin can be presented in its place. Sentences 4 and 5 of paragraph 3 apply accordingly.

(5) A decision on the application must be made no later than three months after submission of the documents required to be submitted by the applicant in accordance with paragraphs 1 to 4. Regarding the recognition of proof of training in accordance with the third sentence of Section 4 (1a) or sentence 2.3 of Section 4 (2) of the German Federal Veterinary Regulations is concerned, four instead of three months are available for cases under sentence 1. In the case of sentence 2, the decision should be made within two months in the cases covered by Section 81a of the German Residence Act (Aufenthaltsgesetz).

(6) The documents to be submitted in accordance with paragraphs 1 to 4 can be transmitted electronically. If there are reasonable doubts about the accuracy of the electronically submitted documents, certified copies may be requested.

Section 64 Approval Certificate

The approval certificate is issued according to the template in Annex 13. It must be delivered to the applicant.

Chapter 5
Supplementary Provisions

Section 65 Recognising of Study Periods and Examinations

(1) The following study periods, if equivalent, will be credited in full or in part
1. periods of a related course of study at a university in Germany,
2. periods of veterinary medicine study abroad or a related course of study at a university.

(2) Under the conditions of paragraph 1, examinations taken as part of a course of study in accordance with points 1 and 2 of paragraph 1 must be credited.

(3) (deleted)

(4) Study periods and examinations are recognised upon application.

Section 66 Responsible Body

(1) The decisions pursuant to Section 65 are made by the university of the country in which the applicant
1. is enrolled or admitted to study veterinary medicine or
2. has submitted an application for enrolment or admission to study veterinary medicine within the scope of this regulation.

In the case of sentence 1 (2), the application in accordance with Section 65 must be submitted with the application for enrolment or admission; a decision in accordance with Section 65 must be combined with the decision on enrolment or admission.

(2) The applicant receives a letter confirming the decision made. Depending on its content, the letter is considered proof within the meaning of Sections 20, 23 and 31.

Unofficial table of contents

Section 67 Exceptions

The university at which the student is enrolled can, on application, allow exceptions of
1. Section 6,
2. the first sentence of Section 20 (2) with regard to the prescribed period for taking the examination,
3. Section 23 (1) (1), that for admission to examinations, the applicant must have passed the Vorphysikum no more than one and a half years beforehand,
4. Section 31 (2) (2), that for admission to examinations, the applicant must have studied veterinary medicine for at least three years after passing the Pre-Clinical Veterinary Examination,
5. Section 58 (1) (1) with regard to the duration of independent practice,

to the extent that this is necessary to avoid unintentional hardship and the aim of the training is not impaired. Exceptions granted in accordance with sentence 1.2 to 1.5 also apply as proof for admission to subsequent examinations, depending on their content.

Section 68 Transitional Provisions

(1) Section 10 (2) and the first sentence of Section 17 (3) are to be applied until 29 December 2017 in the version applicable on the day of the promulgation of this Regulation.

(2) Certificates in accordance with Annex 7 in the version valid until 30 December 2016 issued before this date remain valid.

(3) For students who have completed a section of the Clinical Veterinary Examination before 1 October 2006 in accordance with TAppV of 10 November 1999 (BGBl. I p. 2162), last amended by Article 3 TAppV of 4 December 2002 (BGBl. I p. 4456), TAppV of 10 November 1999 (BGBl. I p. 2162), last amended by Article 3 TAppV of 4 December 2002 (BGBl. I p. 4456) is also to be applied for further studies.

(4) (deleted)

Section 69 Entry into Force, Expiry

(1) This regulation comes into force on 1 October 2006.

Closing formula

The Federal Assembly (upper house of the German parliament) has agreed.

Annex 1 (to Section 2 (1), (2) and (3))
Fields and total number of hours *)

(Source of the original text: BGBl. I 2006, 1841 - 1842)

1.	Physics including Basics of Radiation Physics	56 hours
2.	Chemistry	126 hours
3.	Zoology	70 hours
4.	Botany of Feeding, Toxic and Healing Plants	70 hours
5.	Biostatistics	28 hours
6.	Professional Knowledge (Medical Terminology, History of Veterinary Medicine, Knowledge of the Profession)	42 hours
7.	Anatomy	224 hours
8.	Histology and Embryology	98 hours
9.	Agricultural Science	28 hours
10.	Animal Husbandry and Animal Hygiene	56 hours
11.	General and Clinical Radiology	42 hours
12.	Physiology; Biochemistry	280 hours
13.	Animal Breeding and Genetics including Animal Assessment	84 hours
14.	Clinical Propaedeutics	98 hours
15.	Animal Welfare and Ethology	84 hours
16.	Experimental Animal Science	14 hours
17.	Animal Nutrition and Feed Science	98 hours
18.	Forensic Veterinary Medicine, Professional Regulations and Professional Conduct	28 hours
19.	Avian Diseases	28 hours
20.	Pharmacology and Toxicology including Clinical Pharmacology; Drug and Narcotic Substance Legislation, Drug Prescription and Preparation Theory, Residue Development and Prevention, Risk Assessment	126 hours
21.	Bacteriology, Mycology, Virology, Parasitology, Immunology, Animal Disease Control, Epidemiology	266 hours

22.	Diseases of Reptiles, Amphibian Species, Fish and Bees	28 hours
23.	General and Special Pathological Anatomy and Histology, Post-Mortems	182 hours
24.	Internal Medicine including Clinical Laboratory Diagnostics, Dietetics, Animal Reproduction Medicine, Neonatal Medicine and Udder Diseases; Surgery and Anaesthesiology, Ophthalmology, Dentistry, Hoof and Claw Diseases, Livestock Health Management, Ambulatory Practice	420 hours
25.	Food Science including Food Hygiene, Technology and Quality Assurance, Food Toxicology, Residue Assessment, Food Legislation and Food Testing; Dairy Science including Technology and Quality assurance, Milk Microbiology and Milk Testing; Meat and Poultry Hygiene including Technology and Quality Assurance	252 hours
26.	Clinical training in subjects 19, 22 and 24	518 hours
27.	Interdisciplinary teaching	196 hours
28.	Tasks in agriculture, animal breeding and animal husbandry	70 hours
29.	Practical training in a veterinary practice or veterinary clinic	850 hours
30.	Practical training in hygiene control, food monitoring and inspection and inspection of animals for slaughter and meat	175 hours
31.	Practical Training in the Public Veterinary Sector	75 hours
32.	Elective courses in which the student must also take part	308 hours
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		5,020 hours

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*) The names of the courses and any possible combination of different fields into joint courses are not affected by this Annex.

Additional appendices (forms / certificates, not translated)

No.	Section (§)	Content / Template
2	14.1	Minutes / records of oral examinations
3	16.1	Transcript or records, preclinical Part 1
4	16.1; 16.4	Transcript or records, preclinical Part 2
5	16.1	Transcript of records, clinical & final
6	56.3	EPT certificate food hyhiene & saftely
7	56.3	EPT certificate abattoir
8	58.3	EPT certificate veterinary practice Part 1
9	58.3	EPT certificate veterinary practice Part 2
10	59.3	EPT certificate veterinary hospital
11	60.2	EPT certificate in other institutions
12	62.2	EPT certificate in veterinary administration
13	64	Certificate for approbation / licence to practice

Study Regulations for Veterinary Medicine

at Freie Universität Berlin, School of Veterinary Medicine

In the version published on 08.06.2017 (Memoranda, Official Gazette of Freie Universität Berlin 18/2017 p. 352), last amended by Article II of the Regulation of 17 July 2018 (Memoranda, Official Gazette of Freie Universität Berlin 33/2018 p. 1120)

Non-official translation

Preamble

Based on § 2 Section 1 sentence 9 of the German Veterinary Medical Licensure Law (TAppV) from 27. July 2006 (BGBl. I S. 1827), last amended on 20. December 2016 (BGBl. I. S. 3341), the following study regulations for veterinary medicinal course of study were enacted by the faculty board of the Dept. of Veterinary Medicine, Freie Universität Berlin on April 20, 2017:

Content

Appendix

Detailed course of study with topics and hours by semester

§ 1 Scope

This study regulation, on the basis of the TAppV and the Study and Examination Regulatory Framework (RSPO) of the University, defines content, structure and course work of the veterinary medical curriculum at the Freie Universität Berlin.

§ 2 Objectives

The veterinary curriculum shall provide the students with the intellectual and ethical foundation, the appropriate professional attitude and sufficient knowledge and skills to – after graduation – practice veterinary medicine as defined in § 1 of the German Federal Veterinary Ordinance (BTÄO) from 20. November 1981 (BGBl. I S. 1193), last amended on 31. August 2015 (BGBl. I S. 1474).

§ 3 Start of study, duration

(1) Enrolment into the veterinary curriculum is only possible in the fall semester.

(2) The regular time to degree including the final examination period is five years and six months (§ 1 section 2 sentence 2 TAppV).

§ 4 Introduction into the responsibilities of the veterinary profession

Incoming students are informed about the range of veterinary responsibilities, areas of work within the profession, course of study and opportunities for continued education and specialization. The respective regulations (BTÄO; TAppV, RSPO, study regulation, examination regulation) are introduced in the most recent version.

§ 5 Student advisory services

General student advisory services are provided by the student services and psychological counselling office of the Freie Universität Berlin. Specific issues related to the veterinary curriculum are addressed by the School / Departmental study office.

§ 6 Modes of teaching, courses

(1) During the mandatory courses of the curriculum students are taught the topics relevant for the subjects (exams) as listed in Appendix 1 of § 2 TAppV.

(2) The mandatory interdisciplinary courses should deepen the understanding of complex cross-subject problems and are primary offered as seminars and blended-learning modules.

(3) Elective courses should expand and deepen the range of topics and provide an opportunity for students to focus on specific subjects. Regular attendance of chosen electives is required; assessments are not done. Assistance in routine clinical, laboratory and other work outside the regular curriculum hours can be accounted for as intensified elective training.

(4) Modes of teaching:

a) Lectures (V)

Lectures convey basic theoretical knowledge in a systematic fashion and lay the foundation for the seminars and practical exercises.

b) Seminars (S)

During seminars, topics are emphasized in smaller groups and with practical elements. Instructions can be problem-based. Regular attendance has to be documented.

c) Practical exercises (Ü)

Practical exercises including clinical demonstrations are intended to deepen the understanding of theoretical topics and to acquire basic hands-on skills. Regular and successful attendance has to be documented.

(5) The above listed modes of instruction can be implemented in a blended learning format during different phases of the curriculum. On-site instructions are there combined with internet-based e-learning modules. The latter are offered through the electronic learning environment of the Freie Universität.

(6) Students have to document their progression through the curriculum by certificates and transcripts. For graduation, all required course work has to be shown and all exams have to be passed. Graduation is not possible when at least one of the requirements has definitively not been met at any of the German veterinary schools.

(7) Regular attendance of electives has to be documented. Individual claims to attend specific electives do not exist.

§ 7 Structure of the curriculum

(1) The curriculum is structured in a preclinical and a clinical part as laid out in §§ 7, 8, 20, 23 und 31 of the TAppV. These parts are completed with the respective examinations. Details on curriculum hours and exam topics are specified in the appendix to § 1 section 2 TAppV.

(2) Prerequisite for entering the clinical phase is the completion all exams of the preclinical phase. Students that have passed all but 1 or 2 preclinical exams are conditionally admitted to the modules of the 5th semester (fall semester). This conditional admission ends if the students do not take and pass these exams until December 1st of that semester. This is also applicable to students that had valid reasons for not attending some of the regularly scheduled preclinical exams. In addition, exceptions can be made by the associate dean for education in cases of hardship.

(3) Students are entitled to attend the required modules only at the time of occurrence in their respective regular curriculum.

(4) Successful attention of all extramural practical training modules as laid out in § 1 Section 2 Part 2 TAppV has to be documented to the examination board with indication of the training institution.

§ 8 Study content

The content of the veterinary curriculum is based on the TAppV and compiled in subject specific learning objectives that cover all modules taught during the preclinical and clinical phase of the curriculum

§ 9 Commencement and transition regulations

This regulation becomes effective the day after publication in the official news of the Freie Universität Berlin. At the same time the study regulation published on 27. February 2007 (FU News 75/2007, S. 2398), last amended on 7. July 2011 (FU News 1/2012, S. 6) ceases to be in force.

(3) This regulation is binding for students immatriculated after enforcement. For students already immatriculated before the date of enforcement, all modules completed under the previous regulation will be accepted until 30. Sept. 2017.

Appendix – Modules within the curriculum

Please see Appendix to 3.1.4.a.: Tabular overview of the course of study

Regulations for the preclinical and clinical examinations in Veterinary Medicine

Supplementary Examination Regulations of the Freie Universität Berlin, School of Veterinary Medicine for the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination

In the version published on 08 December 2022 (Memoranda Official Gazette of Freie Universität Berlin 41/2022 p. 986), last amended by Article II of the Regulation of 20 February 2024 (Memoranda Official Gazette of Freie Universität Berlin 05/2024 p. 135)

Non-official translation

Supplementary Examination Regulations of the Freie Universität Berlin School of Veterinary Medicine for the Pre-Clinical Veterinary Examination and Clinical Veterinary Examination

Preamble

Pursuant to Section 10 (4) Ordinance on the Licensing of Veterinarians (TAppV) of 27 July 2006 (German Federal Legal Gazette (BGBl.) I p. 1827), last amended by Article 7 of the law of 15 August 2019 (BGBl. I p. 1307), p. 1307), in conjunction with Section 14 (1) (2) of Freie Universität Berlin's Supplemental Rules and Regulations (Erprobungsmodell) of 27 October 1998 (FU Memoranda 24/1998), the Faculty Council of the Freie Universität Berlin School of Veterinary Medicine issued the following Supplementary Examination Regulations (EPO) for the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination on 16 July 2022:*

* This Regulation was confirmed by the Praesidium of Freie Universität Berlin on 29 November 2022.

Table of contents

Annexes

Section 1
Scope

This Regulation, on the basis of TAppV of 27 July 2006 (BGBl. I p. 1827), last amended by Article 7 of the law of 15 August 2019 (BGBl. I p. 1307), as well as the Study and Examination Regulatory Framework (RSPO) of Freie Universität Berlin, defines the format, requirements and processes of all tests and examinations during the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination in Veterinary Medicine at Freie Universität Berlin.

Section 2
Examination Board

(1) The examination boards established in accordance with Section 5 TAppV meet at least once a year. These meetings are not public. Invitations to the meetings are sent in text form two weeks before the meeting. The Examination Board is quorate if the chairperson/vice-chairperson and at least five other members attend. Decisions are made by simple majority. In the event of a tie, the chairperson has the deciding vote.

(2) Members of the Examination Board may participate in meetings without being present at a meeting location and exercise their rights by means of electronic communication.

Section 3
Admission to Examinations

(1) The Study Regulations for Veterinary Medicine in the Freie Universität Berlin School of Veterinary Medicine in the currently valid version form the basis for the seminars and exercises with an obligation to provide proof of regular and successful participation as a prerequisite for admission to examinations in accordance with Section 20 paragraph 1, Section 23 paragraph 1 and Section 31 paragraph 1 TAppV.

(2) The University will, taking invitation deadlines and processing times into account, send proof of regular and successful participation in courses in accordance with paragraph 1 as well as other courses with an obligation to provide proof of regular and successful participation in accordance with TAppV that is required to verify an admission requirement to the respective Examination Board chairperson in a timely manner.

(3) If assessments from within-term tests are included in the examination grade for an examination subject in accordance with Annex 1, the completion of these assessments is a prerequisite for admission to the examination.

(4) For admission to the final examinations in accordance with Section 30 TAppV, which take place in the 11th semester in accordance with Annex 1, students must have been successfully completed all coursework and examinations scheduled up to this point.

Section 4
Examinations

(1) At the beginning of an examination, candidates must identify themselves with an official photo ID and declare their ability to take the examination.

(2) Oral examinations, practical examinations and examinations involving combinations of these involve the completion of one or several exercises. The duration of oral examinations may not be less than 20 minutes and should not be more than 45 minutes per candidate. Otherwise, in deviation from Section 15 RSPO, reference is made to Section 14 paragraph 1 and Section 17 paragraph 3 Sentence 1 TAppV for oral examinations. For combined examinations with an oral examination part, Sentences 2 and 3 apply accordingly to the taking of the oral examination.

(3) Examinations and tests in the form of single-choice/multiple-choice questions involve answering one or more tasks in written or electronic form. Electronic examinations are held and evaluated using digital technologies. Further details are regulated in Section 12 RSPO. For written or electronic examinations, reference is made to Section 14 paragraph 2 and Section 17 paragraph 3 Sentences 2 and 3 TAppV. The duration of written or electronic examinations, including those consisting wholly or partly of the single-choice/multiple-choice format, may not be less than 30 minutes and should not be more than 120 minutes.

(4) The forms and times of examinations used in the individual examination subjects as well as the forms and times of within-term tests can be found in Annex 1.

Section 5
Single-Choice/Multiple-Choice Format

(1) Examination questions in single/multiple choice format must be based on the examination objectives in accordance with Section 13 paragraph 1 TAppV and must yield reliable examination results. The suitability of the examination questions must be reviewed by at least two members of the Examination Board before the examinations are held.

(2) If, when assessing examinations involving the single-choice/multiple-choice format, it turns out that there is a noticeable accumulation of errors in the answering of individual examination questions, an

examiner will forward all examination documents to the chairperson of the Examination Board immediately and before the announcement of examination results. The chairperson will review the examination questions to see whether they are based on the qualification objectives of the respective course and whether they yield reliable examination results. In cases of doubt, the Examination Board is consulted. If the review reveals that individual examination questions are incorrect, these are not to be taken into account when determining the exam result. The number of examination questions to be taken into account when determining the examination result is reduced accordingly. The reduction in the number of examination questions must not create a disadvantage for a student. If the proportion of assessment points of the examination questions to be eliminated exceeds 15% of the total number of assessment points that can be achieved, the examination must be repeated in its entirety.

(3) An examination held with the single-choice/multiple-choice format is passed if the student has achieved at least 50% of the achievable assessment points (absolute pass limit) or if the number of assessment points achieved by the student is not more than 10% below the average number of points achieved by the participants in the examination attempt for the respective examination (relative pass limit). If the relative pass limit applies, the student must still have achieved at least 40% of the achievable assessment points in order to pass the examination.

(4) Examinations completed using the single-choice/multiple-choice format are to be assessed as follows: If the student has achieved the minimum number of points required to pass the examination in accordance with paragraph 3, the grade is

- “very good” (1) if the student has obtained at least 75%,
- “good” (2) if the student has obtained at least 50% but less than 75%,
- “satisfactory” (3) if the student has obtained at least 25% but less than 50%,
- “sufficient” (4) if the student has obtained less than 25%

of the assessment points that can be achieved in addition to the minimum assessment points required in accordance with paragraph 3; grades allocated are also subject to Section 14 TAppV.

(5) The assessment requirements in accordance with paragraphs 3 and 4 do not apply if
1. the authorised examiners who set the examination questions in accordance with paragraph 1 and evaluate the examination results obtained using the single-choice/multiple-choice format are identical

or

2. the proportion of points that can be achieved in the examination questions in the single-choice/multiple-choice format in an exam that is only partially set in the single-choice/multiple-choice format does not exceed 25%.

3. In the case of repeat examinations, the basis for calculating the relative pass mark is the average number of points achieved on the first possible examination date.

Section 6
Assessment and Grading of Examination Part-Performance

(1) If the examination grade for an examination subject is determined from one or more within-term tests (Section 10 Para. 1 TAppV) and one examination, the individual part-performances are evaluated differently.

Permissible values for part-performances are: 1.0; 1.3; 1.7; 2.0; 2.3; 2.7; 3.0; 3.3; 3.7; 4.0 and 5.0; these grades also apply to part-performances which use the multiple-choice format in accordance with Section 5.

(2) To determine the examination grade for an examination subject from part-performances, the individual assessments of the part-performances are first multiplied by the percentage weighting factor according to Annex 1 and divided by 100; the weighted individual assessments are then added together. When determining the examination grade for the examination subject, only the first two digits after the decimal point are taken into account from the total according to Sentence 1; all other digits are deleted without rounding.

(3) The examination grade for an examination subject calculated in accordance with paragraph 2 is as follows in accordance with Section 16 paragraph 4 TAppV:

1. “very good” for an average of 1.00 up to and including 1.49
2. “good” for an average of 1.50 up to and including 2.49
3. “satisfactory” for an average of 2.50 up to and including 3.49
4. “sufficient” for an average of 3.50 up to and including 4.00
5. “not sufficient” for an average of over 4.00

(4) All part-performances must be passed with at least a grade of “sufficient” (4.0).

Section 7
Communication of Examination Results

(1) The examination result of an oral, practical or combined examination must be communicated orally to the candidate immediately after completion of this examination and must be justified in a comprehensible manner.

(2) For oral, practical or station examinations combining these parts with different examiners, the examination results can, in deviation from paragraph 1, be communicated within three weeks of the last station examination. In this case, an examiner will communicate the result to the candidates in writing or electronically, taking data protection requirements into account.

(3) The assessment of written or electronic examinations takes place within three weeks of the examination and is communicated to the candidates in writing or electronically by an examiner, taking data protection requirements into account.

(4) If an examination grade is formed from the part-performances in accordance with Section 6, then the grade for the examination subject calculated in accordance with Section 6 paragraphs 2 and 3 must also be communicated when the result of the last partial performance is announced.

Section 8
Within-Term Tests

(1) Within-term tests, which can take the form of compulsory lectures, teaching discussions and tests under examination conditions, can be held to record successful participation in courses for which the university requires proof of regular and successful participation in accordance with TAppV as currently. In addition, within-term tests are used to record part-performances in an examination subject in accordance with Annex 1.

(2) The form, organisation, content and evaluation of within-term tests in accordance with paragraph 1 Sentence 1 are part of the description of the respective courses in the central electronic lecture directory. The description of all courses in a semester (curriculum) must be approved by the Faculty Council of the Freie Universität Berlin School of Veterinary Medicine before the start of the semester. Further details are contained in the Study Regulations.

(3) Within-term tests which are included in the examination grade for an examination subject in accordance with Section 10 paragraph 1 TAppV can be viewed in Annex 1. Assessment is undifferentiated (“passed” or “failed”) in all other cases.

(4) If successful participation in an individual course according to paragraph 1 Sentence 1 is not achieved through within-term tests, this course must be repeated in its entirety. For cross-course within-term tests to determine examination part performance, the RSPO regulations for non-attendance, withdrawal, deception, breach of regulations, invalidity of decisions and repeat examinations apply accordingly. The number of repeat examinations for within-term tests is limited to two.

Section 9
Quality Assurance

(1) At least once a year, the Examination Board chairpersons provide the respective Examination Board with an overview of the grade distributions in the individual examinations of the last examination cycle.

(2) Examination protocols and grade distributions may be evaluated with the aim of improving future examinations. The chairpersons of the Examination Board decide on the required documents. Item analysis can be included in the evaluation of written and structured oral or practical examinations.

Section 10
Commencement and Transitional Provisions

(1) This Regulation enters into force on the day after publication in the FU Memoranda (Official Gazette of Freie Universität Berlin).

(2) At the same time, the Supplementary Examination Regulations of the Freie Universität Berlin School of Veterinary Medicine for the Pre-Clinical Veterinary Examination and the Clinical Veterinary Examination of 8 June 2017 (FU-Memoranda 18/2017, p. 360), last amended on 19 May 2022 (FU-Memoranda 19/2022) cease to apply.

(3) This Regulation applies to students who matriculated at Freie Universität Berlin after its entry into force. Students who matriculated at Freie Universität Berlin before this Regulation came into force will be able to complete examinations on the basis of the Supplementary Examination Regulations in accordance with paragraph 2 until 30 September 2024.

Annex 1 to the Supplementary Examination Regulations (pursuant to Section 4 paragraph 4): Examinations Types and Examination Times in Individual Examination Subjects

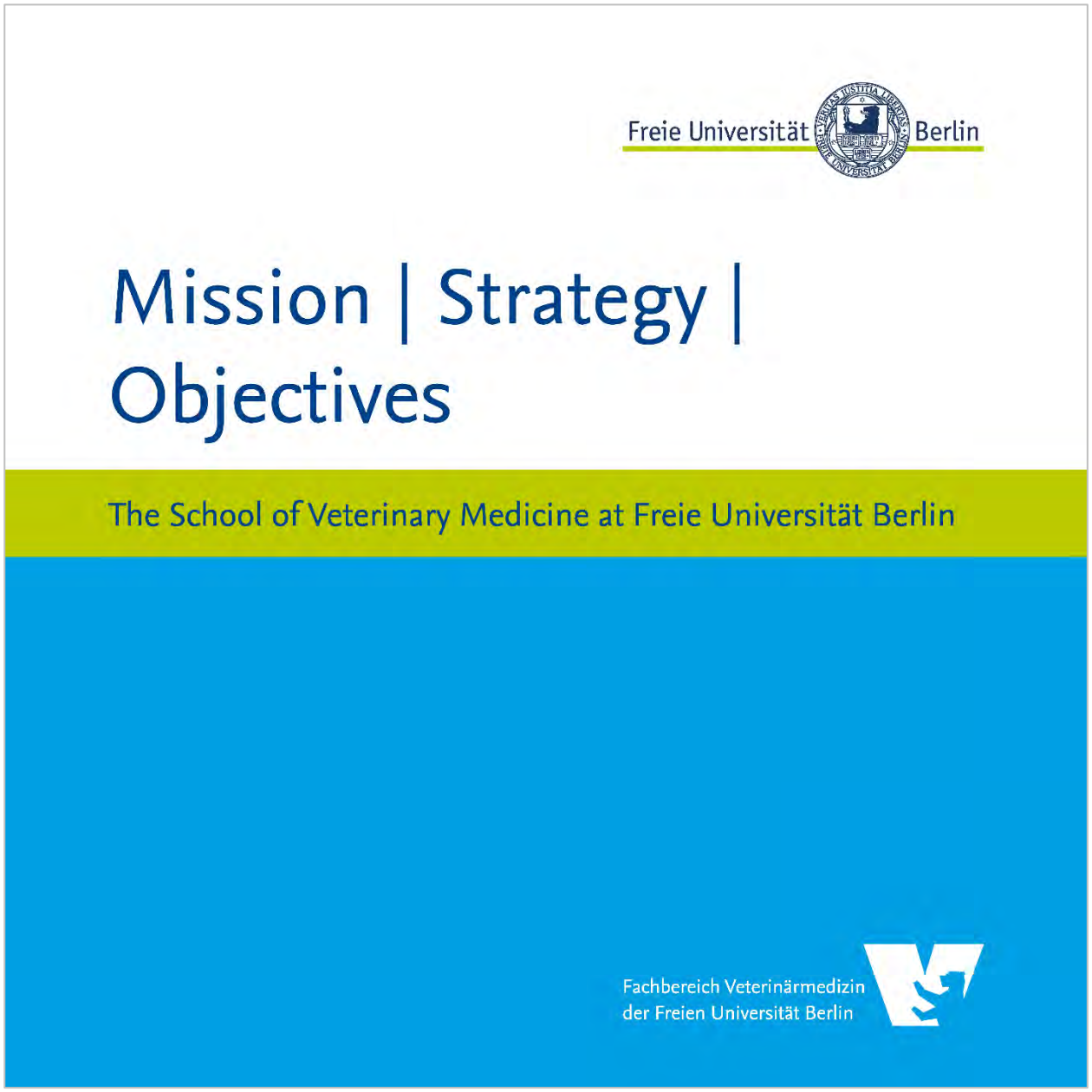
Name of examination	Type and time of examination or within-term test	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of examination
A. Pre-Clinical Veterinary Examination			
Natural Sciences Part of the Pre-Clinical Veterinary Examination (Vorphysikum) Section 19 TAppV			
Physics including Basics of Radiation Protection Section 19 (1) TAppV	Examination during the lecture-free period at the end of the 2nd semester	Oral examination or alternatively examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 21 TAppV
Chemistry Section 19 (2) TAppV	Examination during the lecture-free period at the end of the 2nd semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 21 TAppV
Zoology Section 19 (3) TAppV	Examination during the lecture-free period at the end of the 2nd semester	Oral examination (100%) or alternatively examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 21 TAppV
Botany of Feeding, Toxic and Healing Plants Section 19 (4) TAppV	Examination during the lecture-free period at the end of the 2nd semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 21 TAppV
Anatomical-Physiological Part of the Pre-Clinical Veterinary Examination (Physikum) Section 22 TAppV			
Biochemistry Section 22 (4) TAppV	Examination during the lecture-free period at the end of the 3rd semester	Oral examination (100%)	Section 27 TAppV
Animal Breeding and Genetics including Animal Assessment Section 22 (5) TAppV	Examination during the lecture-free period at the end of the 3rd semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 28 TAppV
Anatomy Section 22 (1) TAppV	Examination during the lecture-free period at the end of the 4th semester	Oral examination with practical exercises (100%)	Section 24 TAppV
Histology and Embryology Section 22 (2) TAppV	Examination during the lecture-free period at the end of the 4th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 25 TAppV
Physiology Section 22 (3) TAppV	Examination during the lecture-free period at the end of the 4th semester	Oral examination with practical exercises (100%)	Section 26 TAppV

Name of examination	Type and time of examination or within-term test	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of examination
B. Veterinary Examination			
Animal Husbandry and Animal Hygiene Section 29 (1) TAppV	Examination during the lecture-free period at the end of the 5th semester	Examination and first repeat examination: Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format; second repeat examination: oral examination (100%)	Section 32 TAppV
Animal Welfare and Ethology Section 29 (2) TAppV	Examination during the lecture-free period at the end of the 5th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 33 TAppV
Animal Nutrition Section 29 (3) TAppV	Examination during the lecture-free period at the end of the 5th semester	Oral examination with practical exercises (100%)	Section 34 TAppV
Clinical Propaedeutics Section 29 (4) TAppV	Examination during the lecture-free period at the end of the 5th semester	Oral examination with practical exercises (100%)	Section 35 TAppV
Virology Section 29 (5) TAppV	Examination during the lecture-free period at the end of the 6th semester	Oral examination (100%)	Section 36 TAppV
Bacteriology and Mycology Section 29 (6) TAppV	2 parts as follows:		Section 37 TAppV
1 Microbiology Course	Within-term test during the 6th semester	Practical exercise with written report (20%)	
2 Bacteriology and Mycology	Examination during the lecture-free period at the end of the 6th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format method (80%)	
Parasitology Section 29 (7) TAppV	Examination during the lecture-free period at the end of the 6th semester	Oral examination with practical exercise (100%)	Section 38 TAppV
Pharmacology and Toxicology Section 29 (9) TAppV	Examination during the lecture-free period at the end of the 6th semester	Oral examination (100%)	Section 40 TAppV
Drug and Narcotic Substance Legislation Section 29 (10) TAppV	2 parts as follows:		Section 41 TAppV
1 Pharmaceutical Galenics and Prescription	Within-term test during the 7th semester	Practical exercise with written or electronic component (40%)	
2 Drug and Narcotic Substance Legislation	Examination during the lecture-free period at the end of the 7th semester	Oral examination (60%)	

Name of examination	Type and time of examination or within-term test	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of examination
Radiology Section 29 (12) TAppV	Examination during the lecture-free period at the end of the 7th semester	Oral examination with practical exercises/OSCE (100%)	Section 43 TAppV
Animal Disease (Outbreak) Control and Infection Epidemiology Section 29 Number 8 TAppV	Examination during the lecture-free period at the end of the 8th semester	Oral examination (100%)	Section 39 TAppV
General and Special Pathological Anatomy and Histology Section 29 (13) TAppV	3 parts as follows:		Section 44 TAppV
1 General Pathology	Within-term test during the lecture-free period at the end of the 8th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (25%)	
2 Special Pathology	Within-term test during the lecture-free period at the end of the 8th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (35%)	
3 General and Special Pathological Anatomy and Histology	Examination in the 9th/10th semester, during rotation	Oral and practical examination (40%)	
Avian Diseases Section 29 (11) TAppV	Final examination during the 11th semester	Oral examination (100%)	Section 42 TAppV
Food Science including Food Hygiene Section 29 (14) TAppV	Final examination during the 11th semester	Oral examination with practical exercises (100%)	Section 45 TAppV
Meat Hygiene Section 29 (15) TAppV	2 parts as follows:		Section 46 TAppV
1 General and Specific Meat Hygiene	Within-term test at the end of the 8th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (40%)	
2 Meat Hygiene	Final examination during the 11th semester	Oral examination with practical exercises (60%)	

Name of examination	Type and time of examination or within-term test	Form of examination (proportion of grade of the examination subject according to TAppV)	Content of examination
Dairy Science Section 29 (16) TAppV	2 parts as follows:		Section 47 TAppV
1 Milk Examination Report	Within-term test during the 7th semester	Practical exercise with written report (30%)	
2 Dairy Science	Final examination during the 11th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (70%)	
Reproductive Medicine Section 29 (17) TAppV	Final examination during the 11th semester	Oral examination with practical exercises (100%)	Section 48 TAppV
Internal Medicine Section 29 (18) TAppV	2 parts as follows:		Section 49 TAppV
1 Internal Medicine, Dermatology and Laboratory Diagnostics (Cross-Species Examination)	Within-term test during the lecture-free period at the end of the 8th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (40%)	
2 Internal Medicine	Final examination during the 11th semester	Oral examination with practical exercises (60%)	
Surgery and Anaesthesiology Section 29 (19) TAppV	2 parts as follows:		Section 50 TAppV
1 General and Special Surgery, Anaesthesiology and Ophthalmology (Cross-Species Examination)	Within-term test during the lecture-free period at the end of the 8th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (40%)	
2 Surgery and Anaesthesiology	Final examination during the 11th semester	Oral examination with practical exercises (60%)	
Forensic Veterinary Medicine, Professional Regulations and Professional Conduct Section 29 (20) TAppV	Final examination during the 11th semester	Examination (written or electronic), if necessary in whole or in part using the single-choice/multiple-choice format (100%)	Section 51 TAppV

Appendix to 1.1.1.: Mission | Strategy | Objectives of the School of Veterinary Medicine at Freie Universität Berlin



Mission | Strategy | Objectives

The School of Veterinary Medicine at Freie Universität Berlin

Imprint

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Approved by the Faculty Council on: 28.03.2024

»Veritas, Iustitia, Libertas
Truth, Justice, Liberty«

FOUNDING PRINCIPLES OF FREIE UNIVERSITÄT BERLIN

True to the founding principles of Freie Universität Berlin, the School of Veterinary Medicine meets societal challenges in research and academic teaching with this mission statement in mind. It is these principles that guide the School's identity and the integration into all endeavors of the university.

Our students and staff are the key resources which contribute to our level of performance.
Together, we maintain excellent standards in teaching, research and provision of services and ensure their sustained development.

All are invited to be actively involved in this endeavour.

Univ.-Prof. Dr. Uwe Rösler
Dean

About Freie Universität Berlin

Freie Universität Berlin is one of the eleven German universities that have been designated as outstanding within the framework of the Initiative for Excellence. In keeping with its self-conception as an International Network University, Freie Universität Berlin seeks to promote international cooperations, strategic alliances and academic networks. The university sustainably supports junior scholars and scientists, as well as the successful acquisition of external funding for research and teaching.

Freie Universität is a full-spectrum university, comprising twelve departments and three Central Institutes that together offer more than **170 different academic programmes** in a broad range of disciplines.

The **system accreditation** is implemented at Freie Universität Berlin to assure quality in the various study programmes.

The School of Veterinary Medicine at Freie Universität Berlin

About the School of Veterinary Medicine

The School of Veterinary Medicine looks back on a long, successful and rich history of veterinary medical training, which extends back to 1790. There have been numerous changes, most recently the merger between the years 1992 and 1997, of the School of Veterinary Medicine at Freie Universität Berlin and the Agricultural and Veterinary Faculty of Humboldt-Universität of Berlin. As one of the five German training establishments for veterinary medicine and related professions, the School is a renowned centre for veterinary medical training, research and veterinary services. We have a strong research focus, especially in the fields of infection medicine, resistance research and animal welfare as well as safe and high quality food production. The School is currently located at three sites in Berlin (Düppel, Dahlem and Mitte). Each contains different specialized institutions. The research activities of the 18 scientific institutions, including the 3 clinics and the Centre for Veterinary Clinical Services, are tied into a world-wide network of veterinary expertise and related disciplines.

With more than 540 employees, our activities include all areas of contemporary and progress-oriented veterinary medicine. This follows the »One Health« concept, in other words, **the inseparability of the welfare of animals, humans and the environment.** It is bound to current scientific advances. In particular, the School count amongst its research and teaching the following specializations:

- Optimized patient care grounded in evidence-based veterinary medicine
- Safety and sustainability in the production of high-quality food of animal origin
- The health and well-being of people through the control of infectious diseases (zoonoses) and antimicrobial resistances and through the study of basic disease and resistance mechanisms (»One Health« approach)
- Animal protection in the complex realm of interactions between animals, humans and the environment

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The School of Veterinary Medicine is also a teaching institution, educating more than 1,600 students, including doctoral candidates, who are distributed amongst **three major degree programmes:**

- State examination degree programme for veterinary medicine
- Bachelor degree programme in equine science
- Dahlem Research School (DRS) doctoral studies in Biomedical Sciences

In addition, we offer a variety of training and advanced education opportunities in veterinary specializations. These include many opportunities for earning academic degrees, additional qualifications, as well as life-long training. The training of veterinary specialists is integrated into the National System of Specialization as well as into the college systems of the European Board of Veterinary Specialization (EBVS).

In addition to an extensive range of patient care on our campus in Düppel, the School offers a wide spectrum of laboratory examinations for veterinary practitioners, for clinics and for the public. Our activities are monitored by professional quality management systems. We are linked across disciplines with regional, national and international authorities and organizations and non-university research institutes, with established colleagues, as well as companies and industry.

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»The School of Veterinary Medicine qualifies«

We are an excellent training and research facility. In 2018, the School was positively evaluated by the EAEVE (European Association of Establishments for Veterinary Education) in light of its state examination degree programme and was included in the list of recognized training institutions. Freie Universität Berlin, of which we are a part, is system-accredited. Furthermore, our bachelor degree programme in equine science was awarded the German Accreditation Council's seal of quality, one of the first of Freie Universität's programmes to do so since the end of 2016. In addition, the DRS doctoral programme in Biomedical Sciences was given the highest award in 2017.

We would like

- to train outstanding veterinarians and ensure their training and application of their specializations in various areas of expertise,
- to enable students to engage in interdisciplinary scientific and clinical endeavours, to think in a performance-oriented manner, as well as to make ethical decisions,
- to prepare our students for their professional fields of activity and provide them with the necessary professional knowledge, practical skills and methods,
- to advise our students in all phases of their degree programmes,
- to offer attractive training and advanced education opportunities,
- to contribute to the replacement, reduction and refinement in the use of animals in biomedical research
- to support our employees in their personal development as well as
- to promote junior scientists and thereby increase the proportion of women in scientific carriers.


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We will

- adapt our curriculum and our learning objections to meet specialized and societal challenges, through constant dialog with students, teachers and the profession,
- improve academic success, through targeted and degree-related offers (mentoring), as well as improving the development and offers of modern forms of teaching,
- closely interlink teaching and research through the integration of students working on research projects with one another,
- teach »Day One Competences« according to international standards,
- continuously improve the qualification of our teachers by sharing appropriate training in university teaching,
- facilitate the transition from university studies to career development by providing a wide range of information events, as well as
- effectively provide support for technical specialization needs by supplying appropriate training and further education programmes.

»The School of Veterinary Medicine leads in research and generates new knowledge«

We are

- a leading research school with an outstanding research profile. Research-related performance indicators show our results are placed at the highest international level.
- a school well supported by external funding.
- a networked school. Our veterinary and biomedical competences are seen in the firm integration in knowledge alliances between other departments at Freie Universität Berlin and the Charité – Universitätsmedizin Berlin. Integration fields include health and quality of life, biomedical principles, material and human-environment interactions.
- an established member of high-performance networks outside Freie Universität Berlin. Due to its integration with large research associations, its launching of joint research projects as well as appointments for outstanding professors, the School is regionally, nationally, and internationally networked.

We would like

- to provide a creative development environment for existing and new research and innovation,
- to maintain our success in the acquisition of external funding and our high level of publication,
- to promote application-oriented research and knowledge transfer through increased cooperation with stakeholders from business and politics,
- to promote current knowledge in disease prevention and the treatment of animals through basic, applied and clinical research,
- to further optimize, through research, the quality and safety of animal-based food, as well as their production in relation to animal welfare and animal health,
- to tackle challenges in all interactions between animals and humans through innovative approaches, including infectious diseases and the emergence and spread of resistance in pathogens, as well as
- to help in the replacement, reduction and refinement in the use of animals in biomedical research (the 3R principle).

We will

- meet contemporary challenges by future-oriented academic structural developments,
- further expand infection medicine with its focus on resistance research and
- strongly and structurally interlink areas of expertise along the production of healthy and safe food of animal origin (food chain).

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»The School of Veterinary Medicine is a gateway to the world«

We are

- a host institution for foreign scientific researchers as well as for foreign students,
- a participant in numerous international exchange programmes in the fields of study and research for students, research associates and other employees,
- highly involved and committed to a number of projects for international development aid in veterinary medicine,
- proud to be a school of internationally sought-after partners for all levels of teaching, research and services and
- are aware of the societal challenges of increased migration of veterinarians from non-EU countries.

We would like

- to be a model for cultural diversity, integration, openness and tolerance with a high proportion of international employees and students,
- to expand existing international university partnerships and thereby promote a lively exchange of students, employees and knowledge between partners,
- to facilitate the development of international contacts with our students and to refine their appreciation of international societal responsibility as well as
- to support migrant veterinarians in their qualifications for working in the German labour market.

We will

- further strengthen and expand our existing central and international university partnerships within the framework of cooperation agreements,
- reinforce the portfolio of our international partnerships, exclusive of existing cooperation partnerships and
- additionally support international and national student mobility.

»The School of Veterinary Medicine promotes junior scientists«

We are

- the initiator of the structured doctoral programme in Biomedical Sciences at the Dahlem Research School (DRS), which trains our junior scientists to the highest international standard,
- involved in various other structured doctoral programmes, such as with the Centre of Infection Biology and Immunity,
- a school that annually guides approximately 70 doctoral candidates to qualify with Dr. med. vet. degrees and approximately 20 doctoral candidates to graduate with Ph.D. degrees (Doctor of Philosophy) and the recently introduced option of qualifying for a Dr. rer. nat. degree offers scientists further interesting postgraduate opportunities,
- providers of a wide range of specialization programmes at national and Europeans levels, including a number of European Diplomate programmes which are certified by European colleges as well as
- a school which annually mentors young scientists to complete their habilitation degrees.

We would like

- to further promote scientific work of the highest quality in accordance with the rules of good scientific practice,
- to lead junior scientists to successfully achieve the highest qualification levels,
- to support and promote young scientists, in particular female scientists and clinical researchers,
- to comply with and advance the rules of good scientific practice in all our activities.

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We will

- expand the targeted recruitment of junior scientists from amongst our students,
- further increase the proportion of students in structured doctoral programmes,
- support junior scientists on their academic career path,
- further encourage experienced and trained junior scientists in their function as mentors and motivators and in particular,
- we will significantly improve the compatibility of scientific careers with active family lives.

»The School of Veterinary Medicine promotes lifelong learning and specializations«

We are

- proud of our structured small animal and equine medicine programmes for lifelong learning and specialization, developed by our specialists from the Small Animal Clinic and Equine Clinic, which are partly offered together with our partner, the German Veterinary Medical Society (DVG), in the format »DVG VET-Progress« at the continuing education centre of the School.
- Organizers and hosts of numerous qualification programmes and training courses for all professional areas of veterinary medicine. We have optimally equipped structures and premises which are specially designed for veterinary needs.

We would like

- to further expand the importance of training of veterinary specialists within the college system of the European Board of Veterinary Specialisation (EBVS) and set up more certified training programmes for this purpose,
- to regularly offer internationally recognized internships and residency programmes in all clinics and paraclinical institutions as well as
- to promote and support life-long learning in veterinarians, as well as in our employees.

We will

- continually upgrade the equipment in our facilities for educational events and thereby ensure that our offer of high-quality training and further education remains attractive,
- advertise and promote our activities for professionals and the public,
- work with our continuing education commission to identify and implement new and promising fields of action in the area of training and continuing education, and finally,
- continue to provide all relevant specializations in the School.

»The School of Veterinary Medicine preserves knowledge and appreciates the history «

We are

- providers of a modern library which contains >170,000 volumes, including >3,000 journals and periodicals,
- proud of our extensive rare collection which houses veterinary historical works, some of which date back to the 16th century. We host the Gurlt's Veterinary-Anatomical Collection comprising unique skeleton and wet preparations of malformations of animals and anatomical wax models. We also display the historic horseshoe collection. Both collections can be traced back to the »Berlin Royal Veterinary School« (1790).
- aware of our responsibility to archive continuously generated digital knowledge for future generations and make it available to the wider public.

We would like

- to offer our students the possibility of using current literature to acquire knowledge and to examine learned information, abilities and application competencies through the preparation of original material,
- to make our existing knowledge easily accessible to all interested parties through the use of appropriate databases and
- to make the achievements of the School clearly visible for an interested public by using publications and research databases.

We will

- continually transfer our publication, research, cooperation and doctoral databases to the latest state-of-the-art technology and interlink them.
- promote open access publications and financially subsidize them through publication funds,
- support the sustained digitization of archive material,
- collaborate with the libraries and archives of national veterinary training institutions, so to develop joint concepts of data processing and digitalization,
- expand the textbook collection in consultation with the Education Commission and provide enough copies at all times.

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»The School of Veterinary Medicine develops the campus«

We are
- a school with over 34,000 m² in more than 50 buildings spread over three locations in Berlin,
- both occupants of a protected estate with historical facilities dating from 1835, as well as recently completed state-of-the-art teaching and research facilities,
- users of the newly established Veterinary Centre for Resistance Research (TZR) that will have a major impact on the interdisciplinary research, teaching and translational outreach in the field of microbial resistance against antibiotics and other antiinfectives,
- certified by EMAS (Eco-Management and Audit Scheme) due to our careful use of natural resources and are committed to energy efficiency and sustainability in all construction and utility issues.

We would like
- to advance the concentration of our infrastructure on the Düppel campus,
- to develop animal keeping and laboratory facilities to modern standards in relation to (animal) disease hygiene, work safety and animal welfare, as well as
- to create a flexible work space in an attractive environment, which fits the needs of all.

We will
- establish a new building for state-of-the-art teaching and research of food safety and hygiene.
- build a new veterinary hospital for farm animals with state-of-the-art facilities for teaching and research for all types of farm animals, which also meets the highest animal welfare standards.
- plan our new buildings in accordance with the Evaluation System for Sustainable Building (BNB certificate).
- regularly evaluate and prioritize repair measures and new construction measures at the School together with the University.

»The School of Veterinary Medicine provides services«

We are

- a veterinary competence centre with comprehensive clinical and medical treatments which are carried out according to the latest findings and with state-of-the-art technology,
- operators of the Veterinary Hospital Freie Universität Berlin which treats over 20,000 animal patients each year. The Veterinary Hospital unites a Small Animal Clinic, an Equine Clinic, a Farm Animal Clinic covering ruminant, swine and poultry diseases, and a Centre for Veterinary Clinical Services for overarching diagnostic questions, some of which are open 24/7,
- providers of a broad spectrum of laboratory tests for veterinary practitioners, clinics, businesses and the public and
- a team of competent experts for all legal and forensic issues.

We would like

- to ensure the care of all animal patients in Berlin and the wider region 24/7, and optimally integrate them into the training of young veterinarians and in veterinary research,
- to be a competent partner for the public in all matters pertaining to animal health, to animal and consumer protection, to food safety and to animal disease control.

We will

» dynamically shape our service portfolio in accordance with the current state of scientific knowledge and future demands of animal and comparative medicine, primarily to promote optimal research and teaching.

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»The School of Veterinary Medicine creates a positive work environment«

We are
- an employer in all areas of veterinary medical teaching, research and services,
- a training facility for four skilled professions (trained veterinary assistants, animal keepers, horse owners and animal owners, specialist beekeepers) and therefore
- proud of highly qualified employees.

We would like
- to assure gender equality and diversity in religious, ethnic and national origin, reflecting the world outside,
- to facilitate fair and equal access to higher education,
- to engender a healthy and satisfactory environment in which all employees can actively participate in our activities,
- to optimize the personal qualifications of each employee in the institutional and personnel health and safety measures,
- to assure planning security for our employees, especially for young scientists and researchers in their qualification phases and
- to ensure the compatibility of family and work in all terms and conditions of employment.


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We will
- implement the personnel development concept of Freie Universität and continue the Berlin plan for the professional promotion of women,
- enter into appropriate employment contracts with young scientists and researchers in accordance with their individual qualification goals,
- develop a concept for the introduction of new employees to the School as well as
- further optimize workplace protection measures and risk assessments, especially in regard to pregnant staff members and students as well as those with specific needs.

»The School of Veterinary Medicine considers itself as a learning organization«

We are
- a school with an open communication culture and transparent decision-making processes,
- an organization, willing to learn, that continuously seeks to improve and develop itself and
- engaged in various national and international organizations and networked in all relevant professional and political bodies.

We would like
- to create efficient processes and structures that are orientated to our core objectives and tasks in research, teaching and services,
- to achieve a steady improvement of our services through the establishment and use of modern methods of quality assurance as well as
- to actively integrate member organizations of the school in decision-making processes and
- to further contribute to the development of all veterinary and related professions throughout Germany.

We will
- regularly review our degree programmes by consulting external expertise on the direction of their content, teaching methods and training results, as well as
- periodically examine our fields of action by internal and external evaluation, disclose these rules and implement them consistently.


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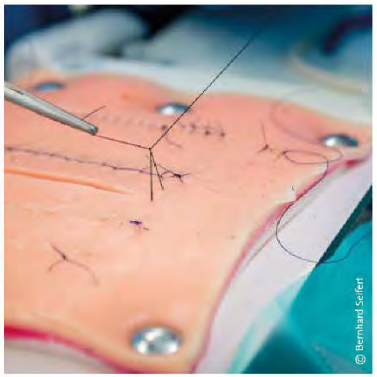
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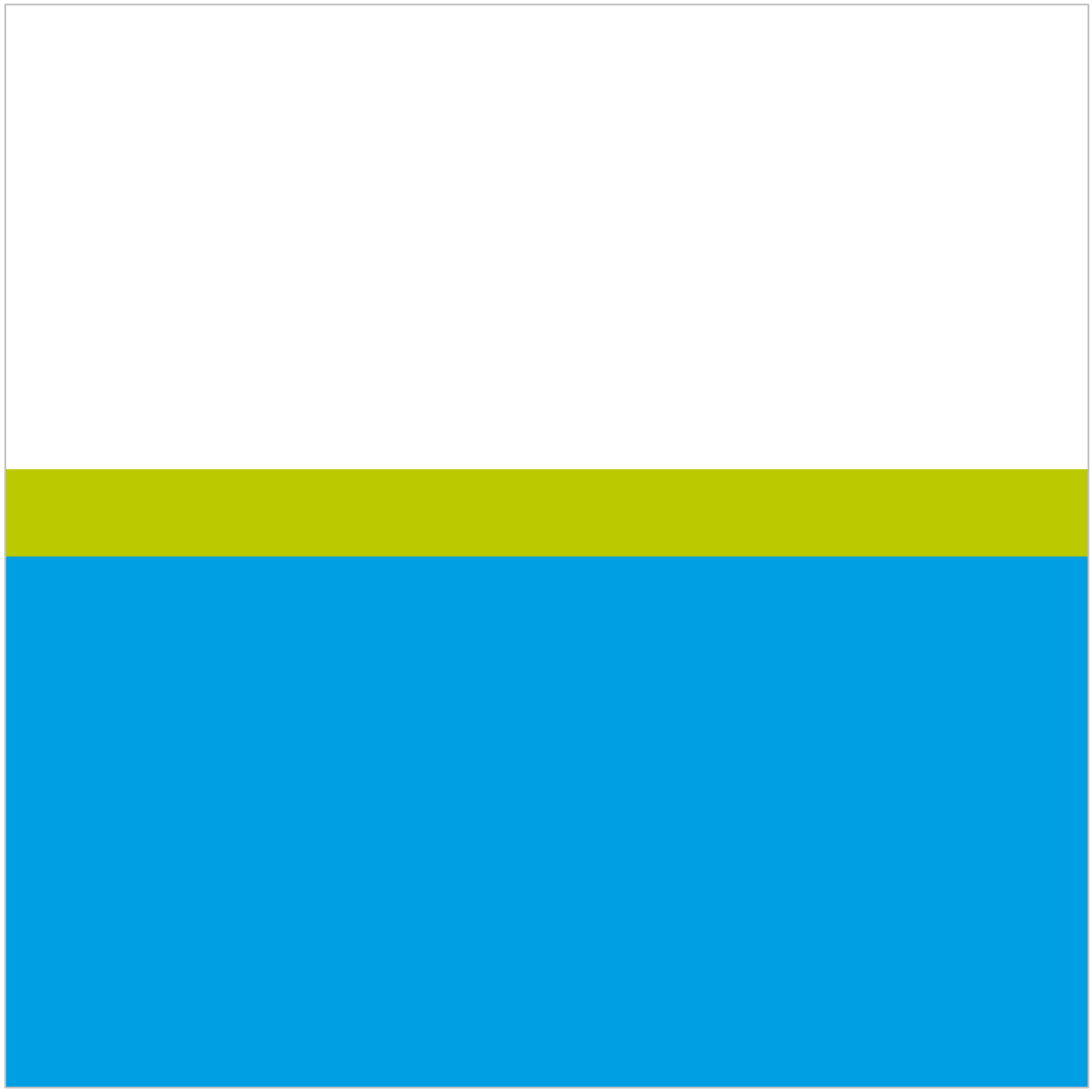


Appendix to 1.1.5.: Profiles of the Commissions and Representatives

Commissions / Committees at the School of Veterinary Medicine

The Faculty Council, the Dean's Office and the Education Commission are the central commissions of the VEE. A detailed description of these and other commissions can be found below:

Faculty Council								
Number of Members	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Professor	👤	👤	👤	👤	👤	👤	👤	
Academic staff members	👤	👤						
Miscellaneous employees	👤	👤						
Students	👤	👤						
Without voting rights	• Managing Director • Women's Representative							
Election	• Every two years							
Chair	• Dean (election is to take place at the constituent meeting of the Faculty Council)							
Legal Framework	• Berlin Higher Education Act (§§ 70, 71, 72) • Basic Division Ordinances of Freie Universität Berlin (§ 13; § 14)							
Meeting Frequency	• Once a month during the semester • Meetings when courses are in not in session are possible							
Duties / Functions	• Statutes for teaching, university studies, qualifications and examination • Budget • Scientific institutions of the school • Commissions • Call for appointment suggestions for professors • Habilitations							
Minutes	• Decision minutes are available internally or via a VPN connection at www.vetmed.fu-berlin.de/protokolle/							

Dean's Office								
Number of Members	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Professor								
Managing Director								
Election	• Every two years (apart from the managing director) • The VEE currently has two managing directors who divide the work between them on a subject-specific basis.							
Chair	• Dean							
Legal Framework	• Basic Division Ordinances of Freie Universität Berlin (§ 15)							
Meeting Frequency	• Normally once a week, Wednesday at 8:00 a.m.							
Duties / Functions	• Budget / budget distribution • Personnel affairs • Administrative matters							
Minutes	• Decision minutes are confidential							

Education Commission								
Number of Members	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Professor								
Academic staff members								
Students								
Special Features	• * Vice Dean for Study Affairs • * At least one student from the degree programme in Equine Science							
Without voting rights	• Study Coordinator • Adviser for University Studies and Teaching							
Election	• Every two years							
Chair	• Election of chairperson from members							
Legal Framework	• Berlin Higher Education Act (§73 I 3) • Basic Division Ordinances of Freie Universität Berlin (§ 14 Paragraph 1 Nr. 5)							
Meeting Frequency	• Once a month during the semester (normally one week before the Faculty Council meeting)							
Duties / Functions	• Appointments committee in educational matters • Contribution to study and examination regulations • Discussion of course-related quality assurance procedures • Formulation of recommendations etc. for improving feasibility of study, qualification profile of degree programmes as well as their alignment with current professional fields							
Minutes	• Decision protocols are available internally or via a VPN connection at www.vetmed.fu-berlin.de/protokolle/							

Continuing Education Commission								
Number of Members	1	2	3	4	5	6	7	8
Professors	👤	👤	👤	👤	👤			
Academic Staff Members	👤	👤						
Doctoral Students	👤	👤						
Miscellaneous Staff Members	👤							
Without voting rights	• Women's Representative							
Election	• Every two years							
Chair	• Election of chairperson from members							
Legal Framework	• Basic Division Ordinances of Freie Universität Berlin (§ 14 Paragraph 1 Nr. 5)							
Meeting Frequency	• At least 1 time each semester and as the occasion arises							
Duties / Functions	• Advising commission concerned with matter of further and continuing education, focusing on the range of further education qualifications (PhD and master's degree programmes and European College programmes) • Surveying and evaluation of existing continuing education programmes • transparent information about the range of programmes							
Minutes	• Decision protocols are available internally or via a VPN connection at www.vetmed.fu-berlin.de/protokolle/							

Ad hoc Professoral Appointments Committee								
Number of Members	1	2	3	4	5	6	7	8
Professors	👤*	👤	👤		👤	👤	👤	
Academic Staff Members	👤							
Students	👤							
Miscellaneous Staff Members	👤							
Special Features	• * A professorial member of the Dean's Office • At least 2 professorial members of the VEE • up to 2 professorial representative of cooperating subjects at Freie Universität or related subjects in the Berlin-Brandenburg region • 1 professor from an unrelated discipline • 1 external professorial member (appointed by the Executive Board)							
Without voting rights	• Women's Representative • One miscellaneous staff member							
Election	• Case-by-case through the Faculty Council • For each appointment one commission							
Chair	• Selection takes place in the inaugural meeting from a group of professorial members							
Legal Framework	• Berlin Higher Education Act (§§71 I Nr. 1, 73 I, 73 II, 99 et sqq.) • Administrative Procedures Act (VwVfG) • Gesetz über das Verfahren der Berliner Verwaltung (VwVfG BE) • Social Code IX (SGB IX) • General Equal Treatment Act (AGG)							

	• Basic Division Ordinances of Freie Universität Berlin • FU Official Announcements 9/1991 • Appointments guidelines of Freie Universität see http://www.fu-berlin.de/service/zuvdocs/weitere-fu/berufung/index.html • Freie Universität Guidelines on the Promotion of Women
Meeting Frequency	• As the need arises
Quorum	• University committees meet quoracy when at least half of the members eligible to vote are present. (§ 47 BerlHG) • In matters which directly affect the appointment of professors, the miscellaneous staff members have no right to vote; they act in an advisory capacity.
Duties / Functions	• Search committee for the selection of new professors • Review of application documents • Clarification and weighting of selection criteria • Decision on inviting applicants to a hearing • Conducting of hearing incl. teaching test • Documentation of the selection decision • Evaluation of the applicant's teaching skills • Proposal of up to four external reviewers • Vote and decide on appointment suggestion to be handed over to the Faculty Council
Minutes	• Application documents and decision minutes are confidential

Ad hoc Habilitation Commission								
Number of Members	1	2	3	4	5	6	7	8
Professors	👤	👤	👤					
Academic Staff Members	👤							
Students	👤							
Miscellaneous Staff Members	👤							
Without voting rights	• Women's Representative • Miscellaneous Staff Member							
Election	• Case-by-case through the Faculty Council • For each appointment one commission							
Chair	• Selection takes place in the inaugural meeting							
Legal Framework	• Habilitation ordinances for the Department of Veterinary Medicine at Freie Universität see https://www.vetmed.fu-berlin.de/einrichtungen/gremien-und-organe/koordinatoren_beauftragte/koordination-habilitationen/Habilitationsordnung.pdf							
Meeting Frequency	• As the need arises							
Quorum	• University committees meet quoracy when at least half of the members eligible to vote are present. (§ 47 BerlHG) • At *performance assessments* for habilitations, in addition to professors, only members with habilitations are allowed to contribute to the relevant committee.							
Duties / Functions	• Advising Commission in the awarding of teaching qualifications to those writing habilitations							

	• Checking of applicant requirements • Examination of written habilitation work • Identification of two external experts • Once the opinions of the reviewers are taken into account, the commission makes a recommendation as to whether a written habilitation should be accepted or rejected. • In the case of acceptance, the Faculty Council determines the lecture topic and date. • The Habilitation Commission presents a review of the applicant's teaching.
Minutes	• Habilitation documents and decision protocols are confidential

Doctoral Committee / ad hoc Commission								
Number of Members	1	2	3	4	5	6	7	8
Professors								
Academic Staff Members								
Without voting rights	• Women's Representative							
Special Features	• Doctoral Committee: Four professors • Doctoral Commission: Doctoral Committee plus three reviewers							
Election	• Doctoral Committee: every two years • Doctoral Commission: as the need arises							
Chair	• Selection takes place in the inaugural meeting							
Legal Framework	• Doctoral ordinances of Veterinary Medicine at Freie Universität Berlin							
Meeting Frequency	• As the need arises							
Quorum	• University committees meet quoracy when at least half of the members eligible to vote are present (§ 47 BerlHG) • At performance assessments for doctorates, in addition to professors, only members with doctorates are allowed to contribute to the relevant committee							
Duties / Functions	• The Doctoral Committee decides on the admission of applicants and their dissertation projects according to doctoral procedure • The Doctoral Committee appoints three reviewers once the dissertation has been submitted. Generally, one of these is an external reviewer. • The committee announces the beginning of the dissertation's review process within the VEE. • Once the deadline for the public inspection of the dissertation expires (four weeks), the doctoral committee instates a Doctoral Commission. Members of the Doctoral Commission are made up of members of the Doctoral Committee and the reviewers. • The Doctoral Commission decides on whether the dissertation should be accepted. • The Doctoral Committee sets the date of the oral examinations, or for the date for a panel of examiners.							
Minutes	• Doctoral file documents and decision protocols are confidential							

Hygiene Commission								
Number of Members	1	2	3	4	5	6	7	8
Professors	1*	1	1	1	1			
Academic Staff Members	1	1						
Students	1							
Miscellaneous Staff Members	1							
Special Features	• The official responsible for hygiene at the VEE is automatically a member of the commission. • The Commission include representatives of all infection and / or laboratory experimental institutes as well as all veterinary clinics.							
Election	• Every two years							
Chair	• The official responsible for hygiene at the VEE							
Legal Framework	• Hygiene ordinances • see vetmed.fu-berlin.de/einrichtungen/gremien-und-organe/kommissionen/hygienekommission/Hygiene-regulations.pdf							
Meeting Frequency	• At least once a year and as the need arises							
Duties / Functions	• Production and further development of a standardized hygiene concept for the VEE as well as production and further development of the VEE's hygiene ordinances. • Development of a standardized plan for the protection of pregnant and immunocompromised students and employees from infection within the animal clinics and within the infection and / or laboratory institutes • Checking the hygiene plans of each of the VEE's scientific institutions and assisting in their production and further development							
Minutes	• Decision protocols are available internally or via a VPN connection at vetmed.fu-berlin.de/protokolle/							

For Veterinary Medicine: **a) Preclinical Examining Board** **b) Clinical Examining Board**	
Professors and academic staff members	a) all examiners for the Veterinary Preclinical Examination (approx. 30) b) all examiners for the Veterinary Examination (> 200)
Election	• The committee is elected every four years. • The competent authority (State Examination Office) after consultation* with Freie Universität Berlin names the members of the examination board. • *Consultation process: Executive directors of the VEE institutions suggest possible examiners to the Examination Board chairperson. The chairperson checks the prerequisites required of the candidate (generally speaking teaching experience and doctorate). After the Examination Board chairperson's consultation, the Faculty Council decides on the application for examination authorisation by the State Examination Office
Chair	• Professors of Freie Universität Berlin are appointed as chairperson and deputies. • Other members are appointed as decribed above. These comprise professors or other teachers of subjects, which are subject to examination.

Legal Framework	• Supplementary examination regulations of the School of Veterinary Medicine at Freie Universität Berlin for the Veterinary Preclinical Examination and the Veterinary Examination (see Appendix "Regulations for the preclinical and clinical examinations in Veterinary Medicine")
Meeting Frequency	• At least once a year and as the need arises
Quorum	• The Examining Board meets quoracy, if, in addition to the chairperson or one of the deputies, at least five other members are present. • It makes decisions by simple majority. • In the event of a tie, the chairperson has power to break it.
Duties / Functions	• If there is noticeable increase in the number of errors in the electoral procedure, the chairperson of the Examining Board should be informed before the results are published. It reviews examination exercises. In cases of doubt, the Examining Board is brought in. If the review shows that the individual examination exercises were faulty, these are not taken into account when the examination results are determined. • The examinations office compiles an overview of the distribution of marks in individual examinations at least once a year for the respective examining board. • Therefore, for written and practical examinations, item analyses, mark distribution and examination records can be evaluated within the scope of quality management. The aim of this is to improve future examinations.
Minutes	• Decision protocols are confidential

Equality Commission								
Number of Members	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Professors	👤	👤						
Academic Staff Members	👤	👤						
Students	👤	👤						
Miscellaneous Staff Members	👤	👤						
Without voting rights	• Women's Representative • Managing Director							
Election	• Every two years							
Chair	• Election of chairperson from members							
Meeting Frequency	• At least once each year and as the occasion arises							
Quorum	• The commission meets quoracy when at least half of the members eligible to vote are present. • In decisions relating to the women's promotions plan, at least 50% of the members present must be women.							
Duties / Functions	• Advising commissions in all questions concerning equality between men and women independently of ethnic and national origin, age, sexual orientation, disability and world view (religion).							
Minutes	• Decision protocols are available internally or via a VPN connection at vetmed.fu-berlin.de/protokolle/							

Working Group "Complaint Management"								
Number of Members	**17**							
Ombudspersons								
Liaison Students								
Local Women's Representative								
Student Equal Opportunities Officer								
Local Diversity Representative								
Vice Dean for Study Affairs								
Advisor for University Studies and Teaching								
Head of Study Office								
Psychologist / psychological psychotherapist from support.points								
Meeting Frequency	• At least once each semester and as the occasion arises							
Duties / Functions	• In regular meetings, members of the working group discuss student suggestions, concerns, complaints and requests for help under strict observation of anonymity; results are recorded. • Significant students' suggestions, concerns, complaints and requests for help (anonymously) are communicated at Education Commission and Faculty Council. • If required, adaptation measures are implemented.							

Officials, Coordinators and Advisory Bodies within the School of Veterinary Medicine

Name	Duties / Functions
BAföG (Federal Education and Training Assistance Act) Coordinator	The BAföG coordinators tend to the certification of academic records, which are required for an BAföG application. He / she can determine which documents are missing and / or are needed or which services should still be rendered. The coordinator is elected by the Faculty Council every two years.
Library Coordinator	The Library Coordinator tends to the library stock holdings, as professorial member in consultation with library management. The coordinator is elected by the Faculty Council every two years.
Coordinator for Habilitation Candidates	Professorial member, who advises and supervises candidates writing habilitation projects. The Coordinator for Habilitation Candidates coordinates habilitation procedures at the VEE and is automatically a member of the extended Faculty Council in all questions pertaining to habilitations. The coordinator is elected by the Faculty Council every two years.
Hygiene Coordinator	The Hygiene Coordinator supports the department in all prevention measures against the introduction and spread of infectious and animal diseases in the department's institutions. He / she is automatically chairperson of the Hygiene Commission. The coordinator is elected by the Faculty Council every two years.
Coordinator for Didactic Continuing and Further Education	Professorial teacher who advises and supports the Deans Office in all matters regarding didactic training of teachings staff, communication training of students, the design and organization of teaching courses and the organisation of the *Day of Teaching*. The coordinator is elected by the Faculty Council every two years.
Coordinator for International Relations, Partnerships and Visiting Students at the Department	The Coordinator for International Relations, Partnerships and Visiting Students at the VEE maintains university partnerships, coordinates international exchange programmes and is the (co-)organiser for information events for incoming visiting students and outgoing students. The coordinator is elected by the Faculty Council every two years.
Student Academic Advising	The student representatives for student academic advising supports students in the meaningful planning and implementation of their university studies, taking into account their individual skills and living situations. Student Academic Advising is determined by student representatives at the Faculty Council.
Academic Advising	Academic advising takes place within the departments in accordance with § 28 of the BerlHG. Therein the employees of the Study Office as well as the Vice Dean for Study Affairs are set out. Staff members from the Study Office and the Dean's Office advise students on all questions pertaining to study processes and support them in difficulties which may arise in the course of university studies.
Liaison Officer for Students	The Liaison Officer for Students supports students in the meaningful planning and implementation of their university studies considering their individual skills and living situations. The liaison officer is elected by the Faculty Council every two years.
Departmental Liaison Officers Pursuant to the Statutes for Safeguarding Good Scientific Practice	The Liaison Officer Pursuant to the Statutes for Safeguarding Good Scientific Practice at the department advises VEE members, by which they are informed about suspected scientific misconduct, and takes up pertinent pointers. In cases of reasonable suspicion of culpable misconduct,

	the VEE's liaison officer passes the case to the central commission for formal investigation. The liaison officer is elected by the Faculty Council every two years.
Departmental Representative at the Federal Veterinarian Association	A departmental representative is automatically the observing delegate for the School of Veterinary Medicine at Freie Universität Berlin at the Federal Veterinarian Association. The representative is elected by the Faculty Council every two years. Currently, 12 professional associations and groups maintain observer status.
Departmental Representative at the Medical Senate	The Medicine Senate is a body at the Charité University Medicine in keeping with § 5 of the Berlin University Medical Law. Members are elected for terms of 2 ½ years. Members comprise one half elected from the Academic Senate at Humboldt-Universität zu Berlin and one half elected from the Academic Senate at Freie Universität Berlin.
Representative of the Department in the Joint Commission of DRS Biomedical Sciences	The joint commission of the departments of *Biology, Chemistry and Pharmacy* and the *Schhol of Veterinary Medicine* manages the concerns of Doctoral Studies in Biomedical Sciences (doctoral studies) at the Dahlem Research School (DRS) at Freie Universität Berlin. The joint commission of the Dahlem Research School comprises 10 members, of which 3 professorial members, one representative of the academic staff members and one DRS BiomedSci student representative from the School of Veterinary Medicine are elected. The election takes place every two years.
Representative at the Berlin Veterinarian Association	A VEE representative is automatically a delegate at the Berlin Veterinarian Association. The representative is elected by the Faculty Council every 2 years. By decision of the Berlin Veterinarian Association, the elected representative participates and is entitled to vote in delegate sessions. cf. § 7 Berlin Associations Law

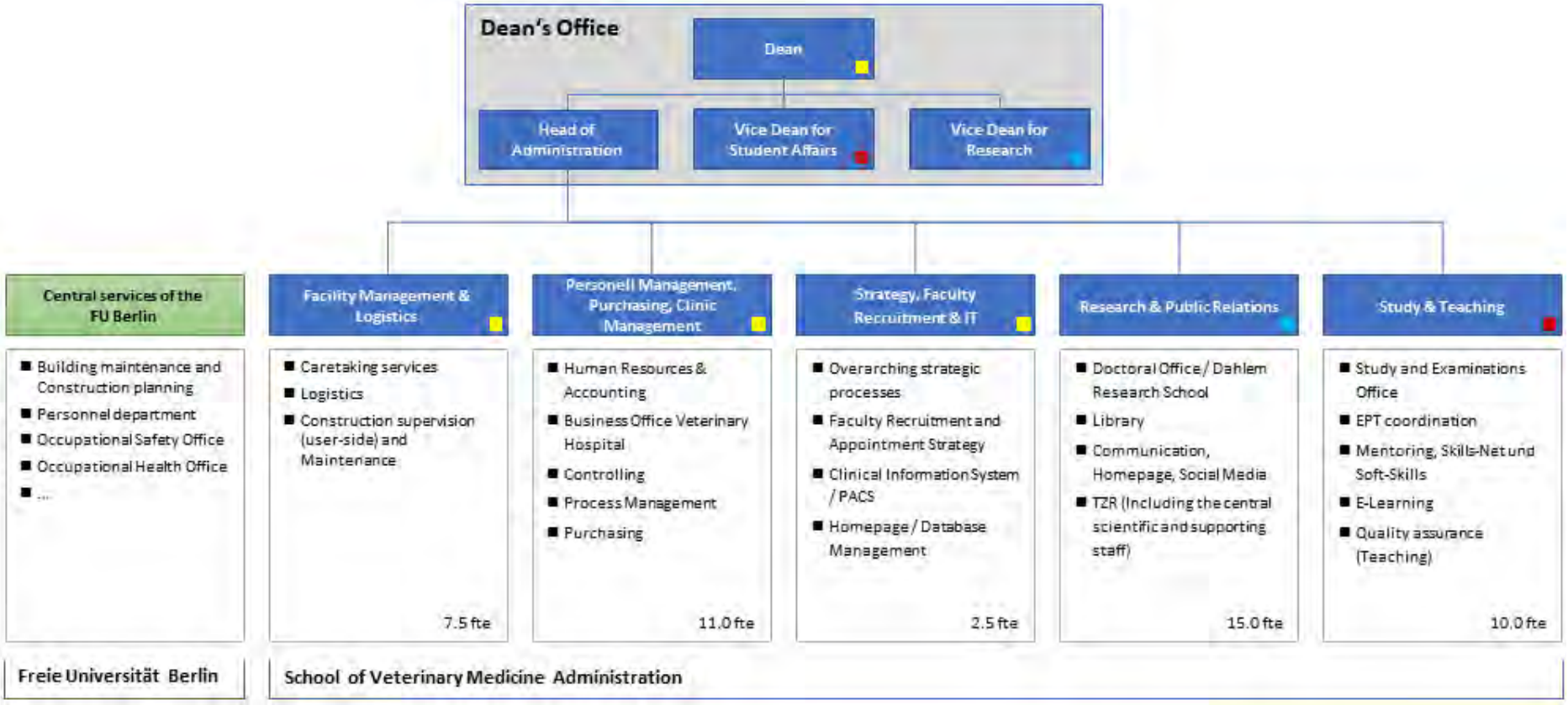
Interest Groups and Representatives at the School of Veterinary Medicine

Name	Duties / Functions
Local Women's Representative	The local women's representatives represent the interests of women on site. They are involved in all recruitment and appointment procedures, they promote women's and gender research in each discipline and take on advising functions (e.g. in cases of sexual harassment, discrimination, stalking etc.). There is no direct election for the women's representatives. The process is two-fold. In the 1st part, two veterinarians from each status group (professors, academic staff members, miscellaneous employees) are elected from among the women at the VEE - a 'Women's Election'. In the 2nd part, these women elect the Local Women's Representative and her deputy for a two-year term of office. All female members of the VEE (students who study veterinary medicine as their main subject as well as academic and non-academic employees) who are eligible to vote may stand for election. For more information, see the following regulations: fu-berlin.de/sites/zwv/vorschriften/erfrauen.pdf
Local Diversity Representative	The Local Diversity Representative serves as contact for diversity issues at the VEE with links to the Executive Committee of Freie Universität Berlin, specifically Diversity-Controlling and Governance. The main task is to collect information on diversity-related activities and demands, to provide proactive hints on diversity issues and to channel contact information. The representative serves as first point of contact for the Executive Board, the Dean's Office and the VEE's administration in issues related to diversity.
Animal Welfare Officers and Animal Welfare Committee	Animal Welfare Officers support all members of the VEE in questions pertaining to animal welfare and in the planning and conducting of animal experimentation research procedures. In particular, they advise those responsible for breeding and keeping, researchers, employees, and animal keepers in questions pertaining to animal keeping hygiene, procurement, shelter and the keeping of animals. They are the contacts for all parties when animal experiments are planed, applied for and conducted. They submit a statement to the licensing authorities for each experiment project. They are consulted in planning and construction issues related to the keeping of animals. Animal welfare officials are appointed in writing by the Dean of the department. In these matters, only those who have achieved the necessary qualifications in keeping with animal welfare laws and animal experiment protection laws and who are employed at Freie Universität can be appointed. The Animal Welfare Officers are supported by an Animal Welfare Committee. The Freie Universität's Guidelines for Animal Protection regulate further: vetmed.fu-berlin.de/einrichtungen/vph/we11/tierschutzbeauftragte/formulare2019/00-Tierschutzrichtlinie-der-Freien-Universitaet-Berlin-vom-21_12_2015.pdf
Sustainability Team	The Sustainability Team wants to promote internal dialog about Sustainability. The team promotes the understanding processes and bundle and integrate expert knowledge from the various levels and departments.

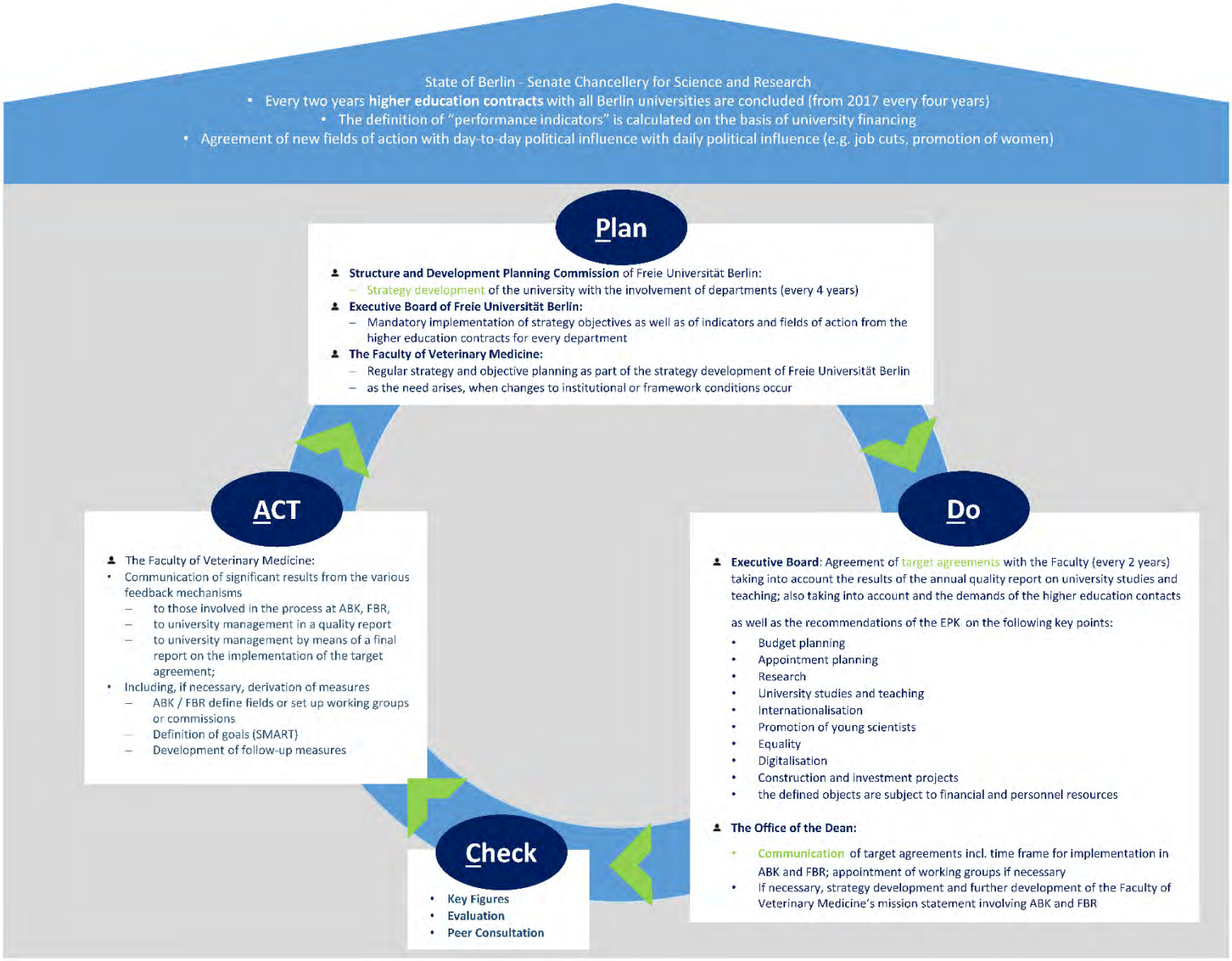
Additional commissions and representatives not listed in the Organisational chart of Standard 1.2.2.

Examination board for BSc Equine Science
Examination board for MSc Equine Medicine
Examination board for MSc Small Animal Science
Contact person for the German Agriculture Research Aliance (DAFA)
Officer for IT and Data Safety
Coordinator for Una Europe Activities
Local Election committee
VEE representative in the University Ethics Committee
VEE representative in the Excellence Council
Cordinator for collections and archive material
Cordinator for the open day at the VEE
Coordinator for the Long Night of the Sciences
Cordinator for the study exchange with Ecole Nationale Vétérinaire d'Alfort
Coordinator for public relations
Spokesperson for Veterinary Centre for Resistance Research (TZR)
VEE representative for the Research Commission (FU-internal research funding)
VEE representatives for the Inter-University Commission for the Award of Doctoral Scholarships (Elsa Neumann Foundation)
VEE representative for the Commission for the awarding of the Ernst Reuter Prize
VEE representative for the Commission for the Promotion of Young Female Scientists (KFN)
VEE representative for the Commission for Ethics in Security-Relevant Research (KEF)
VEE representative for the Service Portfolio Board
VEE representative for the Quality Assurance Advisory Board for Studies and Teaching
VEE representative for the Standing Committee of the Dahlem Research School

Appendix to 1.2.2.: Organisational chart of the Dean's Office



Appendix to 1.3.2.a.: PDCA cycle “Strategy and Objective Planning”



Appendix to 1.3.2.b.: Strategic Operating Plan of the School

Strategic Theme and Objectives	Implementation	Indicators
Budgeting		
• Increased and sustained budget revenue	2024 - 2025	Budget agreement with the University
• Higher flexibility in small animal and equine clinic management	2024 - 2025	Agreement on budget
• Adaptations to faculty budget allocation	2025, 2027	Decision in the Faculty Council
• Support of fundraising	2024 - 2031	Faculty revenues
• Optimization of organisational structures	2024 - 2031	Organisational plan
Appointment scheduling		
• Increase of human resources (academic staff, resistance research, clinics) balanced against required student admissions	2025 - 2027	Personell plan and student admission numbers
• Recruitment of new professors: pigs, radiology, small animal surgery, small animal reproductive medicine, biochemistry, histology and embryology, surgery and internal medicine of ruminants	2024 - 2025	Ininiated recruitment procedures, successful appointments
Research		
• Application for collaborative third-party funded projects (CRC, Research training group)	2024 - 2026	Application submitted
• Establishment of the clinical research HUB in the veterinary hospital	2024 - 2026	Establishment
• Strengthening alternative research topics in relation to 3Rs and their implementation in teaching	2024-2028	Application submitted
• Collaborations with livestock and agriculture institutions and industry	2024 - 2031	Project plan
Study and teaching		
• Review of the curriculum	2024 - 2031	Modified curriculum implemented, Revision request for TAppV placed with ministry
• Improvement of teaching-learning processes	2024 - 2031	Protocols of the Education Commission
• Horizontal and vertical coordination of subject contents	2024 - 2031	Syllabus, All-subject learning objective catalog matched to Day One Competences
• Further development of practical training in agriculture on training farms	2024 - 2026	Improved programmes and contracts with training farms
• Stakeholder consultation with extramural veterinary specialists	2025, 2028	Protocols of the meetings
• Increase of quality commitment	2024 - 2026	QA documentation, Annual quality report

Postgraduate teaching		
• Establishment of structured, postgraduate training programmes, in clincis as well as in paraclinics	2024 - 2028	Establishment
• Promotion of joint actions with the Chamber of Veterinarians and Professional Associations	2024 - 2031	List of conferences and meetings
Internationalization		
• Targeted partnerships with leading universities	2024 - 2031	Quality of active collaborative projects
• Student exchange (incoming and outgoing)	2024 - 2031	Statistical evaluation, Annual quality report
Human resource development		
• Establishment of programmes to improve the welfare of staff and students	2024 - 2026	Student evaluation, Internal/EMAS audit results
• Mandatory courses in teaching for teaching staff, Surveillance of teaching qualification	2024 - 2031	Documentation in the online Didactic Center
• Continuing education for technical staff	2024 - 2031	Documentation, Internal/EMAS audit results
Promotion of young scientists		
• Number of veterinary dissertations (Dr. med. vet., Dr. rer. nat.) and PhD thesis ~ 80 pa	2024 - 2031	Annual statistics
• Up to 25% PhD theses in Dahlem Research School	2024 - 2031	Annual statistics
• Up to 10% Dr. rer. nat. dissertations	2024 - 2031	Annual statistics
Gender equality		
• Continuous development of the support programme for women in clinical, preclinical and paraclinical research	2024 - 2025	Website, Biannual Women Promotion Plan and associated reporting
• Continuous development of new gender equality approaches with university	2024 - 2031	Website, Biannual Women Promotion Plan and associated reporting
Electronic Resources		
• Electronic working time recording	2024 - 2025	In use
• Converting the temporary VetCam project for streaming of clinical and VTH settings to permanent operation	2024 - 2026	Establishment
Building and investments		
• New Institute of Food Safety & Hygiene	2024 - 2025	Under construction, Opening in 2025
• Magnetic resonance scanner in the Centre for Veterinary Clinical Services	2026	In use
• Concept development and planning for a new Farm Animal Clinic	2024 - 2027	University budget allocation, Start of construction
• Planning and construction of additional infrastructure for research & teaching	2024 - 2031	Budget allocation, Target Agreement with University, Installation

Appendix to 1.4.1.a.: Freie Universität Berlin Understanding of Quality Management and PDCA cycles on Quality Management System and Quality Assurance of Freie Universität Berlin

Preamble
Freie Universität Berlin was founded in 1948 by students and teachers. The freedom of research and teaching, social responsibility and international knowledge exchange characterizes its self-conception. Freie Universität Berlin is bound in its teaching and research to its motto, Veritas, Iustitia, Libertas. The following overarching objectives in university studies and teaching are orientated towards this self-conception.

Quality objectives
University studies at Freie Universität Berlin impart specialist and methodological competence in each discipline and in academia as a whole. They are based on the highest academic standards and the state of international research. Graduates of Freie Universität Berlin can extract, apply, reflect upon and convey, academic knowledge.

University studies at Freie Universität Berlin promote intellectual independence, reflective abilities and critical thinking. They impart ethical competencies for the responsible handling of research results.

University studies at Freie Universität motivate and enable engagement with and for society. On the basis of their academic qualifications, graduates of Freie Universität Berlin have at their command social competences, gender competences and the ability to handle inequality and social diversity.
University studies at Freie Universität Berlin prepare students for academic work in research and teaching as well as for science and academic based professions. The graduates of Freie Universität Berlin have the necessary qualifications to take up employment in Germany and abroad. Above all master's degree programmes and doctoral programmes prepare students for scientific and academic research.

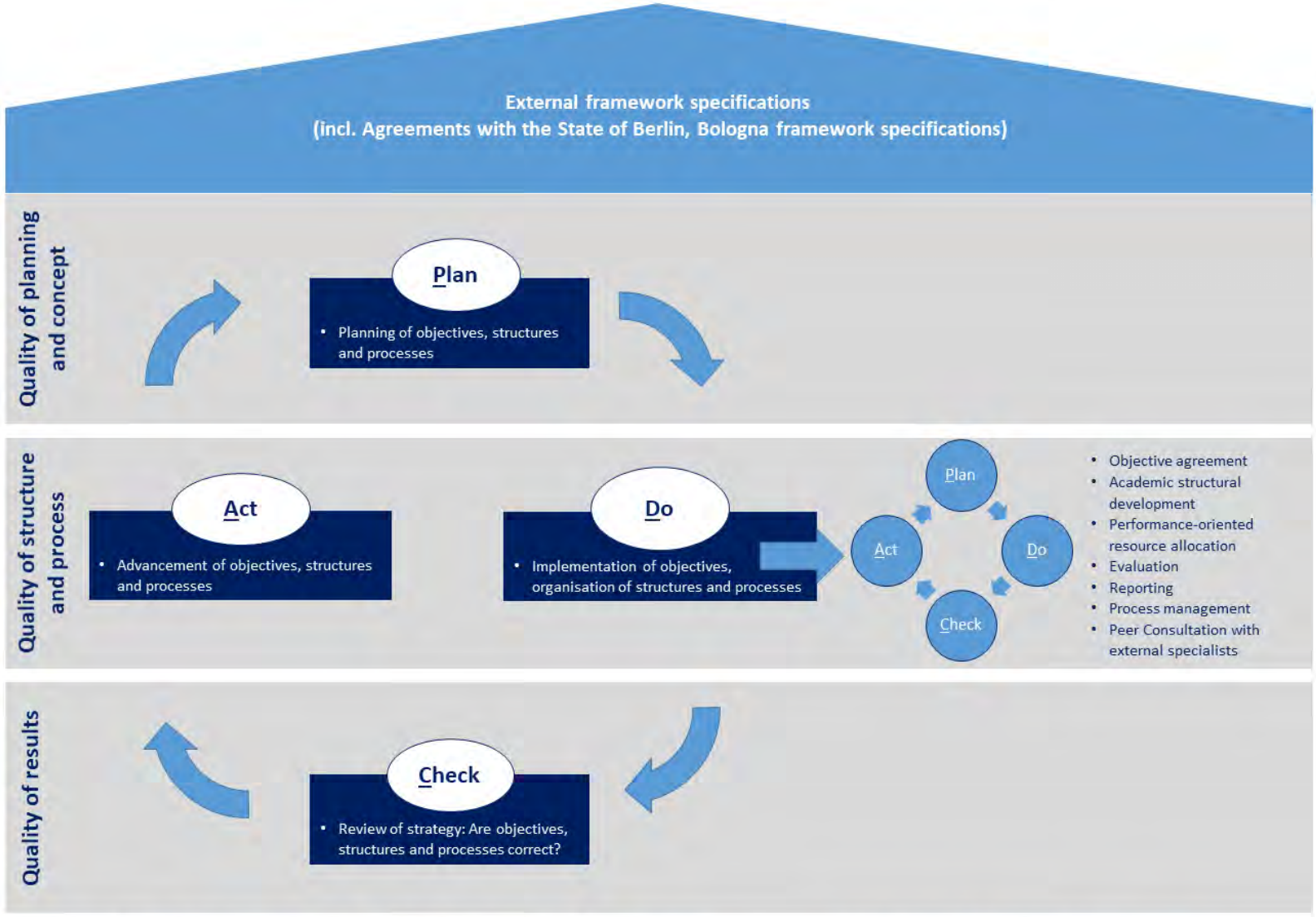
To ensure the success of its students, Freie Universität Berlin creates – also by its international orientation – the best possible framework conditions. It takes into account different circumstances in which students may find themselves, and supports its students in dealing with the different challenges which may face them.

University-wide discussion processes in 2020/2021:

- Mission Statement for Teaching and Education:
  https://www.fu-berlin.de/en/universitaet/profil/studium_lehre/leitbild/index.html

- Teaching and Education in 2030 – Shaping the Future Together:
  https://www.fu-berlin.de/en/sites/zukunft-lehre/index.html

Loop Control System "Quality Management for University Studies and Teaching"



Double loop: **Quality in university studies and teaching strategy development**

Single loop: **Quality assurance processes**

PDCA Cycle "Quality Assurance System of Freie Universität Berlin and the VEE"

Appendix to 1.4.1.b.: Overview of the University-wide description of processes related to studying and teaching

Process type	Process description
Control processes	• Process Description S.01.01.FU: Implementing Objective Agreements (Extract, see Appendix D) • Carry out appeal proceedings • Deliver funds on a performance-orientated basis
Key processes of studying and teaching	**K.01.FU: Establish, develop and close degree programmes** • Process Description K.01.01.FU: Establish new degree programmes • Process Description K.01.02.FU: Advancement of Degree Programmes (Extract, see Appendix D) • Process Description K.01.03.FU: Close degree programmes • Process Description K.01.04.FU: Cancel or (not) extend study programme time limit **K.02.FU: Quality Assurance** • Process Description K.02.01.FU: Review degree programme with regard to compliance with current framework requirements (“Traffic Light System”) • Process Description K.02.02.FU: Carry out a Peer Consultation with external specialists as part of the design of new degree programmes • Process Description K.02.03.FU: Carry out a Peer Consultation with external specialists for existing degree programme • Process Description K.02.04.FU: Conduct central student surveys • Process Description K.02.05.FU: Conduct central graduate survey • Process Description K.02.06.FU: Evaluate teaching • Process Description K.02.07.FU: Carry out a quality discussions on studying and teaching • Process Description K.02.08.FU: Internal accreditation of degree programme within the framework of implementation • Process Description K.02.09.FU: Internal reaccreditation of degree programme • Process Description K.02.10.FU: Extend accreditation for expiring degree programme **K.03.FU: Counseling** • Process Description K.03.01.FU: Inform, advise and take care of prospective students and current students **K.04.FU: Application and admission** • Process Description K.04.01.FU Calculate capacities and create admission regulations • Application and approval for first-semester admission to restricted undergraduate studies • Application and approval for first-semester admission for master's programmes

K.05.FU: Enrollment into degree programmes

- Process Description K.05.01.FU: Enrol onto a degree programme

K.06.FU: Study offer

- Process Description K.06.01.FU: Providing and Offering Courses (Extract, see Appendix D)

K.07.FU: Carry out examination matters

- Process Description K.07.01.FU: Carry out module examinations
- Process Description K.07.02.FU: Completing a thesis
- Process Description K.07.03.FU: Completing studies
- Process Description K.07.04.FU: Provide two-thirds certificate for Master's application
- Process Description K.07.05.FU: Appeal and review examination results
- Process Description K.07.06.FU: Compensation for disadvantages in examinations

K.08.FU: Student mobility

- Process Description K.08.01.FU: Erasmus+ exchange studies (outgoings)
- Process Description K.08.02.FU: Erasmus+ Europe exchange studies at Freie Universität Berlin (incomings)
- Process Description K.08.03.FU: Direct exchange studies (outgoings)
- Process Description K.08.04.FU: Direct exchange studies at Freie Universität Berlin (Incomings)

K.09.FU: Recognition of credits

- Process Description K.09.01.FU: Grading to a higher semester and recognizing or transferring credits
- Process Description K.09.02.FU: Change study and examination regulations (SPO) and recognize achievements
- Process Description K.09.03.FU: Recognize credits earned abroad

K.10.FU: Student Administration

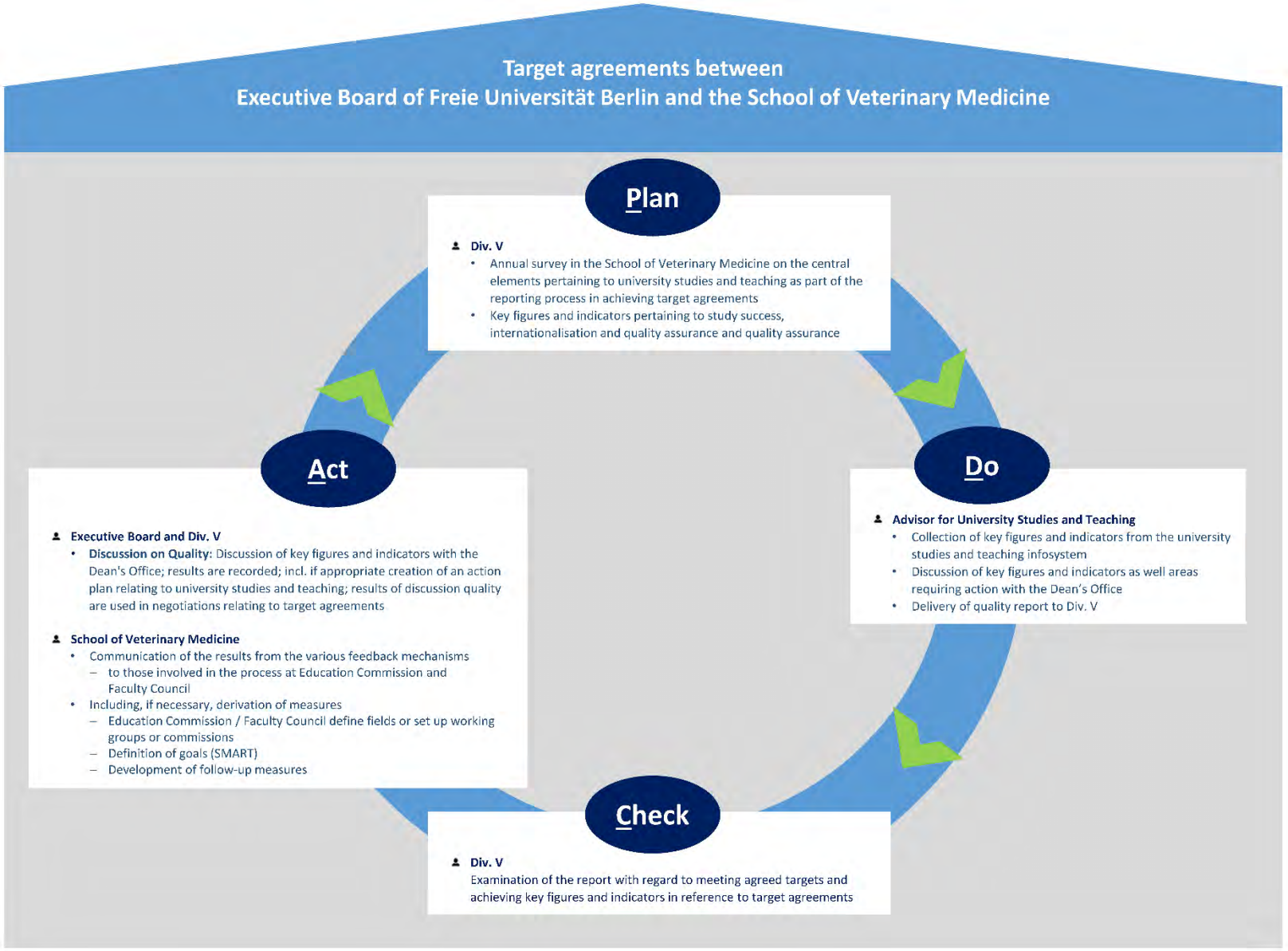
- Process Description K.10.01.FU Students' confirmation
- Process Description K.10.04.FU Studying in compliance with maternity protection
- Process Description K.10.05.FU Administration of fees
- Process Description K.10.07.FU Report student and examination data
- Process Description K.10.08.FU Carry out student administration services

K.11.FU: Unenrolment

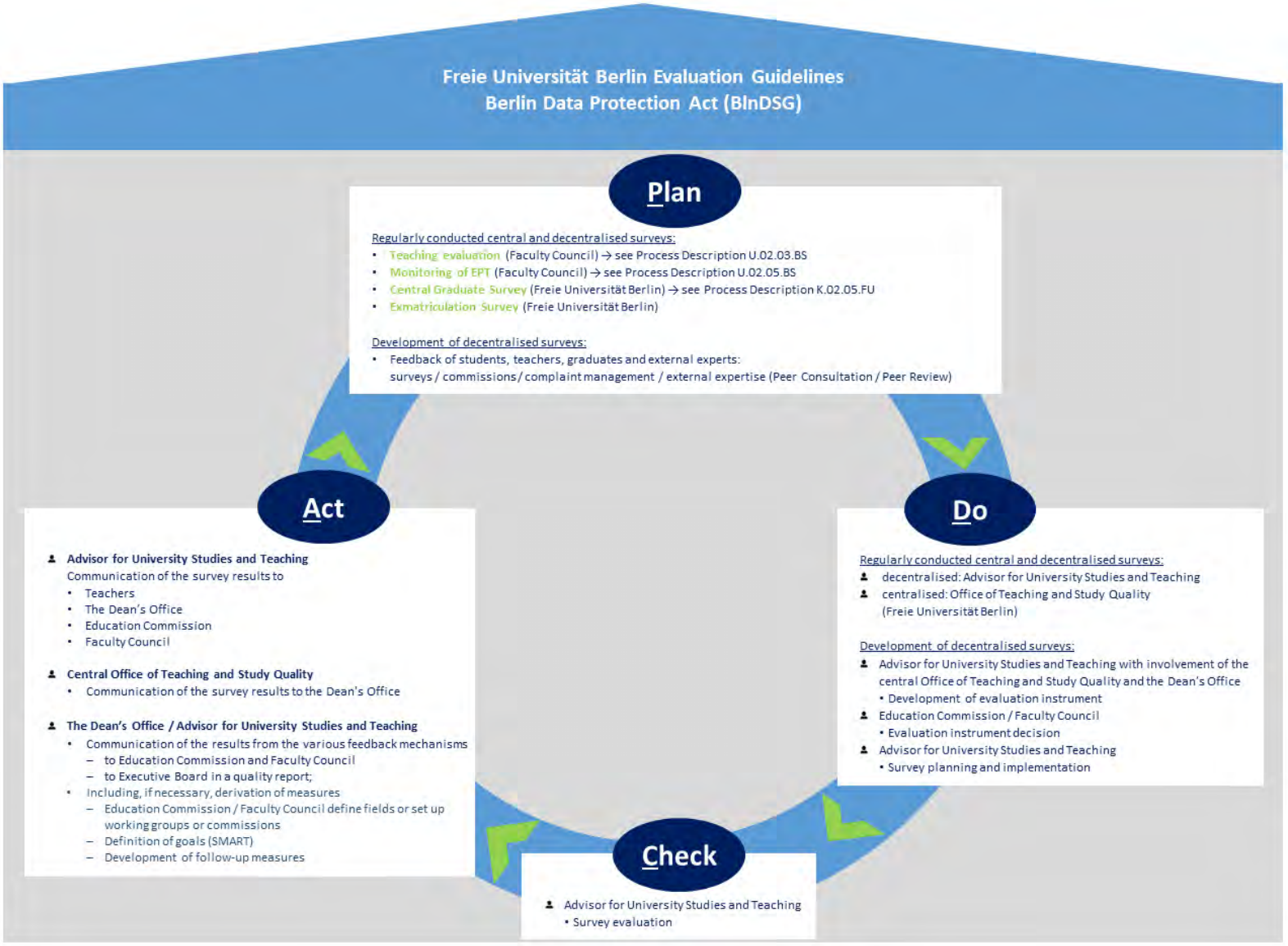
- Process Description K.11.01.FU: Unenrolment of students

	K.12.FU: Doctorate • Process Description K.12.01.FU Admissions for individual doctorates • Process Description K.12.02.FU Conduct individual doctorate • Process Description K.12.03.FU Complete doctorate • Process Description K.12.04.FU Extend dissertation processing time • Process Description K.12.05.FU Change title/language • Process Description K.12.06.FU Change doctoral supervisor • Process Description K.12.07.FU Discontinue doctorate
Support processes	**Support processes** • U.01.01.FU Provide continuing education programme of the continuing education center • Record and coordinate requirements for SAP applications in the area of studies and teaching • Service institutions • Libraries • Provide staff • Provide financial resources • Provide buildings and technical infrastructure • Provide digital technologies and IT systems • Provide electronic administration and services • Provide IT infrastructure • Operate reporting system

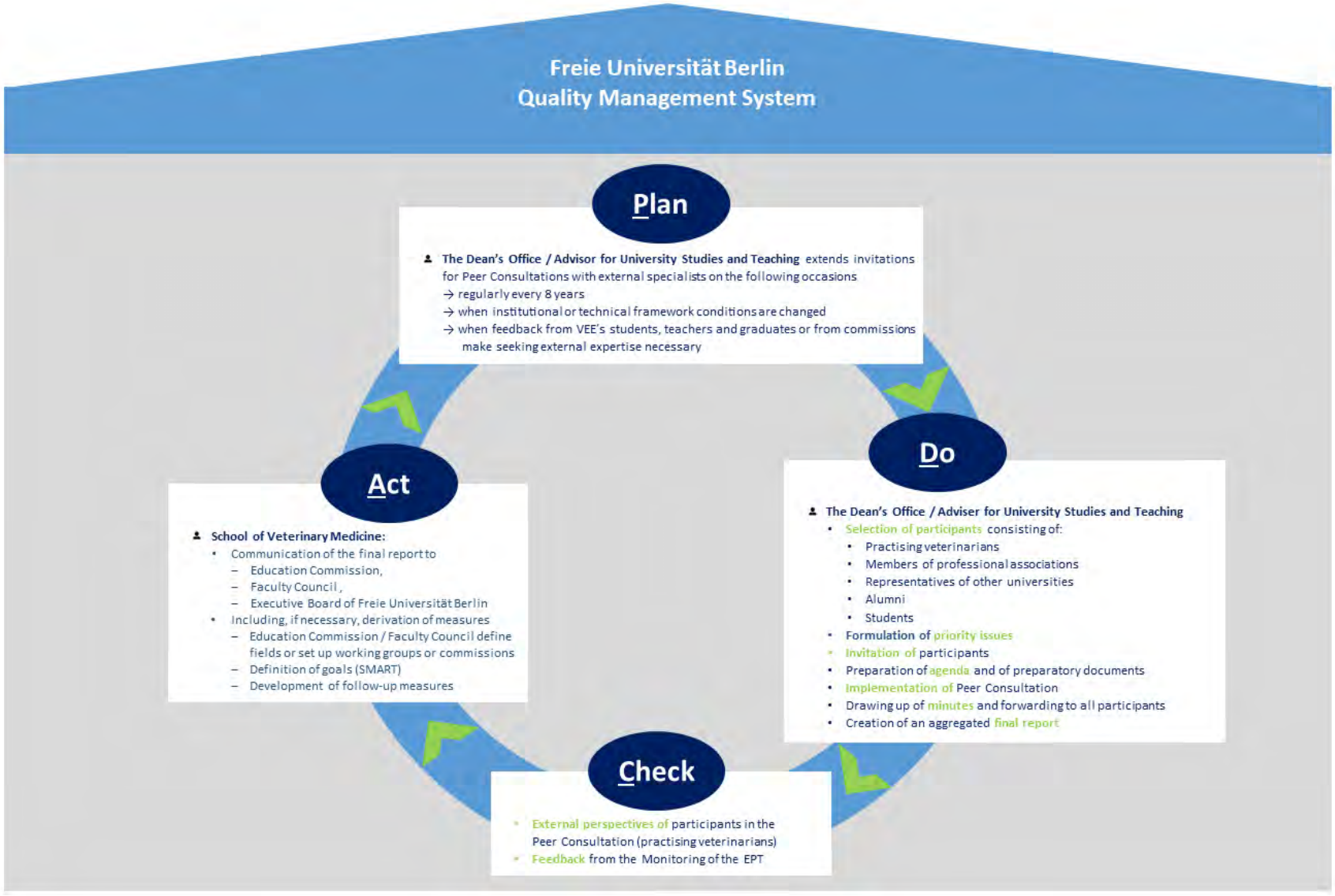
Appendix to 1.4.1.c.: PDCA cycle “Quality Report: University Studies and Teaching”



Appendix to 1.4.1.d.: PDCA cycle “Implementation of Surveys/Evaluations”



Appendix to 1.4.1.e.: PDCA cycle “Obtaining External Expertise (Conducting Peer Consultation with external specialists)”



Appendix to 1.7.1.: European Association of Establishments for Veterinary Education | Interim Report | May 2021

Freie Universität Berlin

Faculty of Veterinary Medicine Freie Universität Berlin

European Association of Establishments for Veterinary Education |
Interim Report | May 2021

CONTENTS

1. NAME AND LOCATION OF THE ESTABLISHMENT

Faculty of Veterinary Medicine
Freie Universität Berlin
Oertzenweg 19b
D-14163 Berlin, GERMANY

2. NAME AND DETAILS OF THE CURRENT ESTABLISHMENT'S HEAD

Dean Prof. Dr. Jürgen Zentek
Faculty of Veterinary Medicine
Freie Universität Berlin
Oertzenweg 19 b
D-14163 Berlin, GERMANY

3. DATE OF THE COMPLETION OF THE INTERIM REPORT

26 May 2021

4. DATE OF THE PREVIOUS VISITATION

The Full Visitation took place from 13-17 November 2017.
Faculty status awarded by ECOVE: CONDITIONAL ACCREDITATION

The Re-visitation was carried out from 15-17 July 2018. The Committee concluded that the Major Deficiency, identified in 2017, had been fully corrected.
Faculty status awarded by ECOVE: ACCREDITATION

5. EXPECTED DATE OF THE NEXT VISITATION (WHICH SHOULD BE COMPLETED NOT LATER THAN 2 MONTHS BEFORE THE DATE OF THE ECOVE MEETING PRECEDING THE END OF GRANTED STATUS)

November 2024

6. MAJOR CHANGES

Any major changes which may affect the compliance with the ESEVT Substandards since the previous SER *(e.g. new national regulations, new foreign language track, more admitted students, less funding, lower caseload)*

There are no major changes since the last SER that affect the ESEVT substandards.

7. PROGRESS IN THE CORRECTION OF MAJOR DEFICIENCIES (NON-COMPLIANCE WITH ESEVT SUBSTANDARDS) AND PLANS FOR THE NEAR FUTURE

Major Deficiency 1: insufficient number of hours of hands-on clinical training under the supervision of academic staff in order to achieve Day One Competences for each individual student

Immediately after the full Visitation in 2017, the faculty implemented short-term measures and defined mid-term measures to fully resolve the Major Deficiency. The Re-Visitation Team of 2018 confirmed that short-term measures were fully effective and mid-term measures were appropriate to fully correct the Major Deficiency.

All mid-term measures as laid out in the 2018 rSER are meanwhile also in effect. They included the introduction of new clinical modules (practical modules in surgery, anaesthesiology, and emergency medicine), the revision and extension of the final year's clinical rotations, as well as the implementation of a student logbook for clinical rotations. The mid-tearm measures required a formal change of the study curriculum (entered into legal force on 17 July 2018). The curricular changes were implemented stepwise until the summer of 2020. The new practical modules were evaluated very positively by our students. Since October 2018, clinical logbooks are used on a regular basis.

8. PROGRESS IN THE CORRECTION OF THE MINOR DEFICIENCIES (PARTIAL COMPLIANCE WITH ESEVT SUBSTANDARDS) AND PLANS FOR THE NEAR FUTURE

Minor Deficiency 1: insufficient training on emergency cases for all students, especially in companion animals

As described above, the implementation of a practical module in emergency medicine was a key feature of the revision of the curriculum. The course concept was extended to didactic and leadership training where students also acquire competences in effective instruction under emergency settings. The first run of the course was completed by September 2020 and evaluated very positively. The course is currently being refined and extended with completion in 2021.

Minor Deficiency 2: inadequate monitoring and evaluation of EPT

The mandatory evaluation of internships for students and EPT providers had already been fully introduced before the 2018 revisitation. Meanwhile, evaluation questionnaires were discussed and harmonized among all five German establishments for veterinary education.

Minor Deficiency 3: insufficient signage for biosecurity and restricted areas

All measures announced in the 2018 rSER have been addressed. The completion of a separate hygiene building ("Lavatorium") was originally planned by the end of 2018. For reasons beyond our control, however, the construction is delayed. The end of the construction period is currently planned for early 2022.

Minor Deficiency 4: inadequate isolation facilities in small animals

The planned structural modifications and the complete reconstruction of the in-patient area is still under review by the Division for Engineering and Utilities of the Central University Administration. However, the isolation wards for infectious dogs and cats (e.g. parvovirus infections and feline rhinotracheitis) have already been redesigned and the tenders for the construction work are currently in progress.

Minor Deficiency 5: insufficient number of necropsies in cattle and pigs

The continuous efforts to increase the number of necropsies in cattle and pigs are reflected in an effective increase of indicator 18 (see Annex).

Minor Deficiency 6: sub-optimal use of the VTH companion animal patients for clinical training of undergraduate students

The changes reported in the rSER and implemented in Summer term 2018 resulted in substantial improvement of practical training in all clinics with a higher number of companion animal

patients seen by students. The changes included an internal reorganisation of the clinical rotations with much stronger involvement of all students in treating regular as well as emergency patients.

Minor Deficiency 7: insufficient specialised academic staff in some key clinical disciplines

The establishment takes continuous efforts to ensure an adequate coverage of teaching by veterinary specialists. The respective indicator is well above average. We are currently restructuring the companion animal clinics together with an external counselling service and will address the potential for improvement in key clinical disciplines during that process.

ANNEX: UPDATED EXCEL TABLE WITH ESEVT INDICATORS Raw data from the 2 full academic years preceding AY 2019-2020

Calculated Indicators from raw data		Establishment values	Median values[1]	Minimal values[2]	Balance[3]
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.13	0.15	0.13	0.00
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.72	0.84	0.63	0.09
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	1.43	0.88	0.54	0.89
I4	n° of hours of practical (non-clinical) training	721.00	953.50	700.59	20.41
I5	n° of hours of clinical training	736.00	941.58	704.80	31.20
I6	n° of hours of FSQ & VPH training	285.50	293.50	191.80	93.70
I7	n° of hours of extra-mural practical training in FSQ & VPH	250.00	75.00	31.80	218.20
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	62.46	62.31	43.58	18.88
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	4.05	2.49	0.89	3.16
I10	n° of equine patients seen intra-murally / n° of students graduating annually	9.81	4.16	1.53	8.28
I11	n° of rabbit, rodent, bird and exotic patients seen intra-murally / n° of students graduating annually	39.68	3.11	1.16	38.52
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	-	5.06	0.43	-
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	45.57	16.26	8.85	36.72
I14	n° of equine patients seen extra-murally / n° of students graduating annually	1.05	1.80	0.62	0.43
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	3.01	1.29	0.54	2.47
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.11	0.11	0.04	0.07
I17	n° of companion animal necropsies / n° of students graduating annually	1.76	2.11	1.40	0.36
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0.90	1.36	0.90	0.00
I19	n° of equine necropsies / n° of students graduating annually	0.35	0.18	0.10	0.25

[1] Median values defined by data from Establishments with Accreditation/Approval status in May 2019
[2] Recommended minimal values calculated as the 20th percentile of data from Establishments with Accreditation/Approval status in May 2019
[3] A negative balance indicates that the Indicator is below the recommended minimal value
* Indicators used only for statistical purpose

I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	1.63	2.65	0.88	0.75
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.53	0.27	0.06	0.47
I22*	n° of PhD graduating annually / n° of students graduating annually	0.51	0.15	0.07	0.44

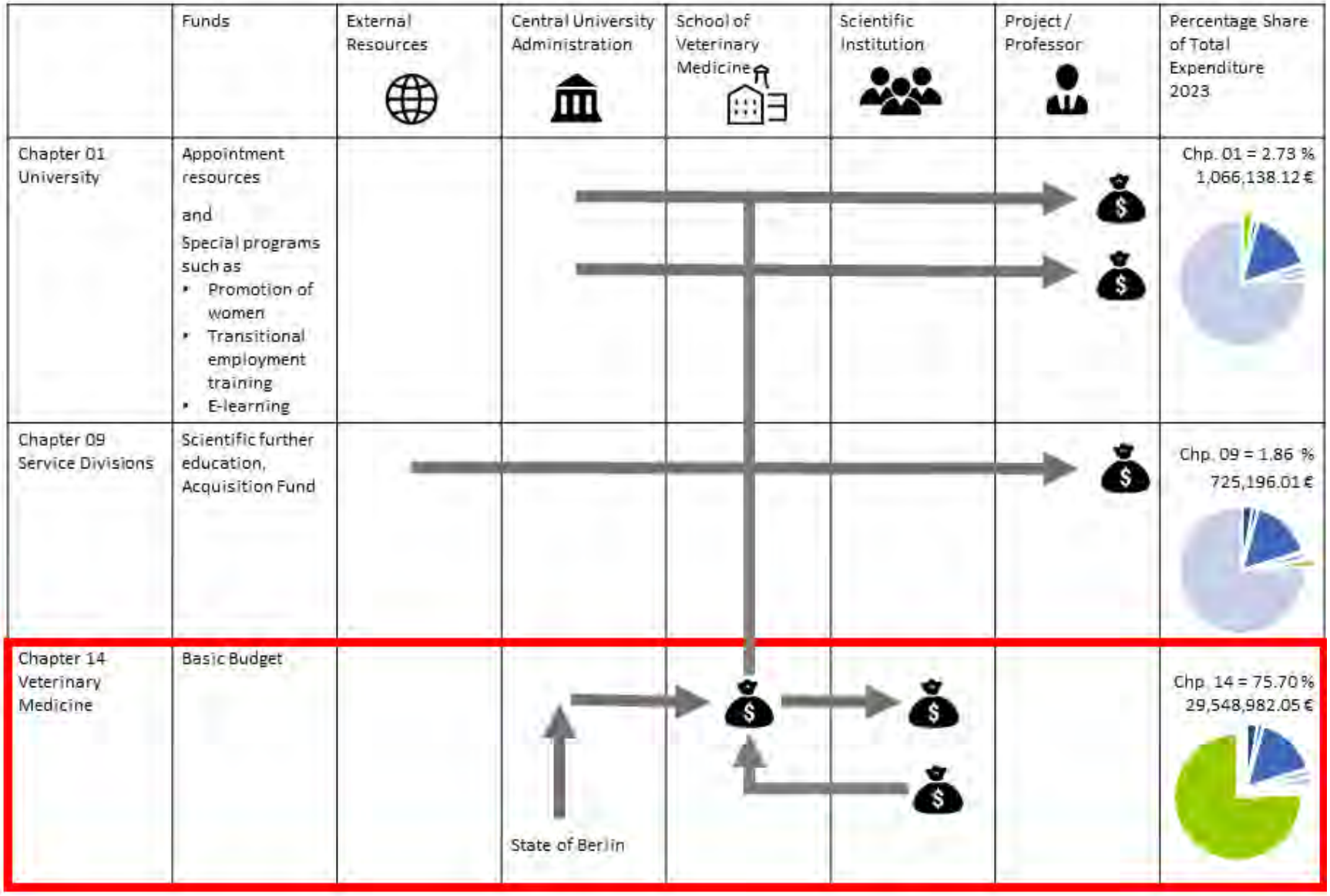
Comments

not applicable

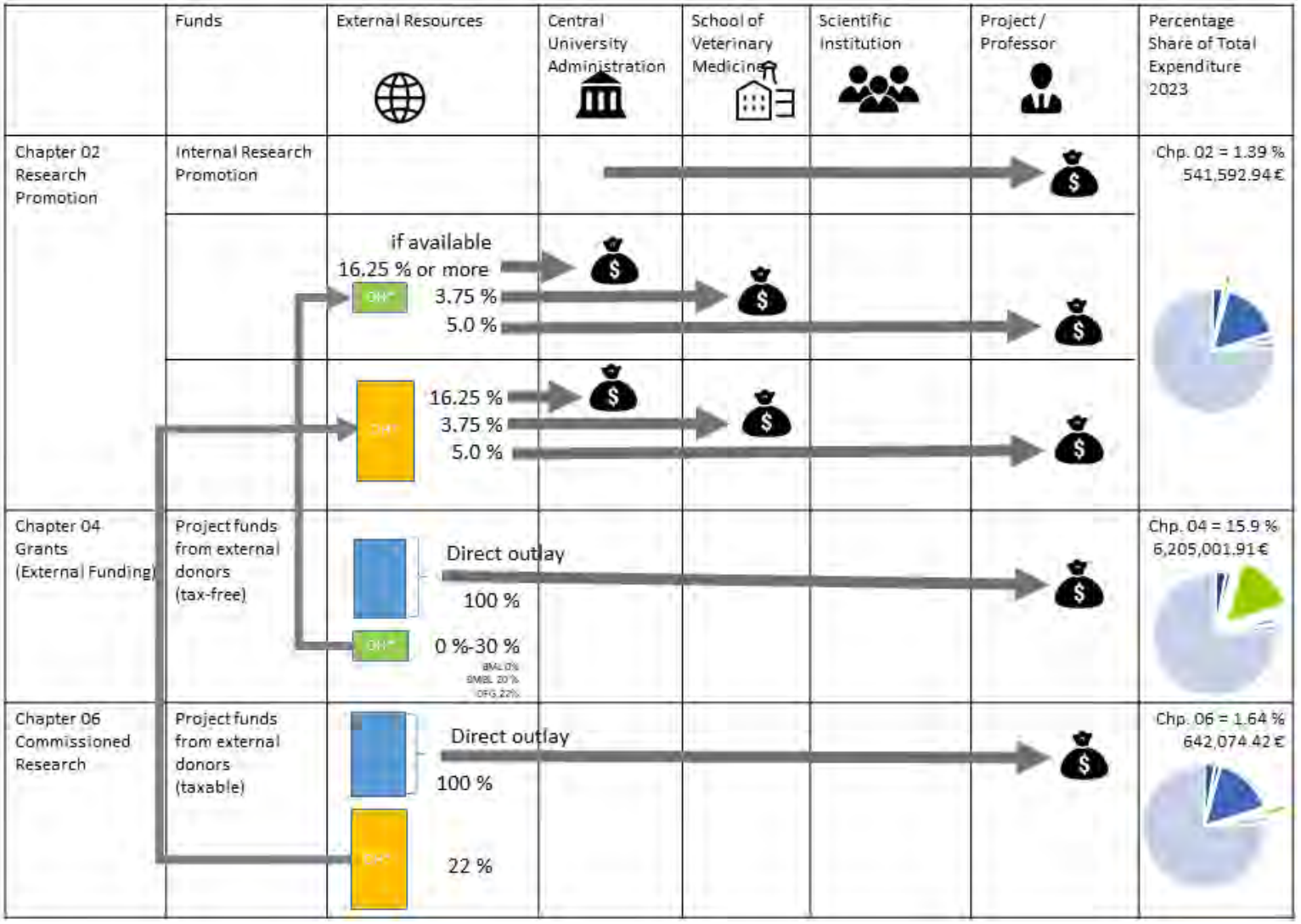
Suggestions of improvement

not applicable

Appendix to 2.1.2.: Schematic Representation of Budget Allocations for Budget Chapters 01, 09 and 14

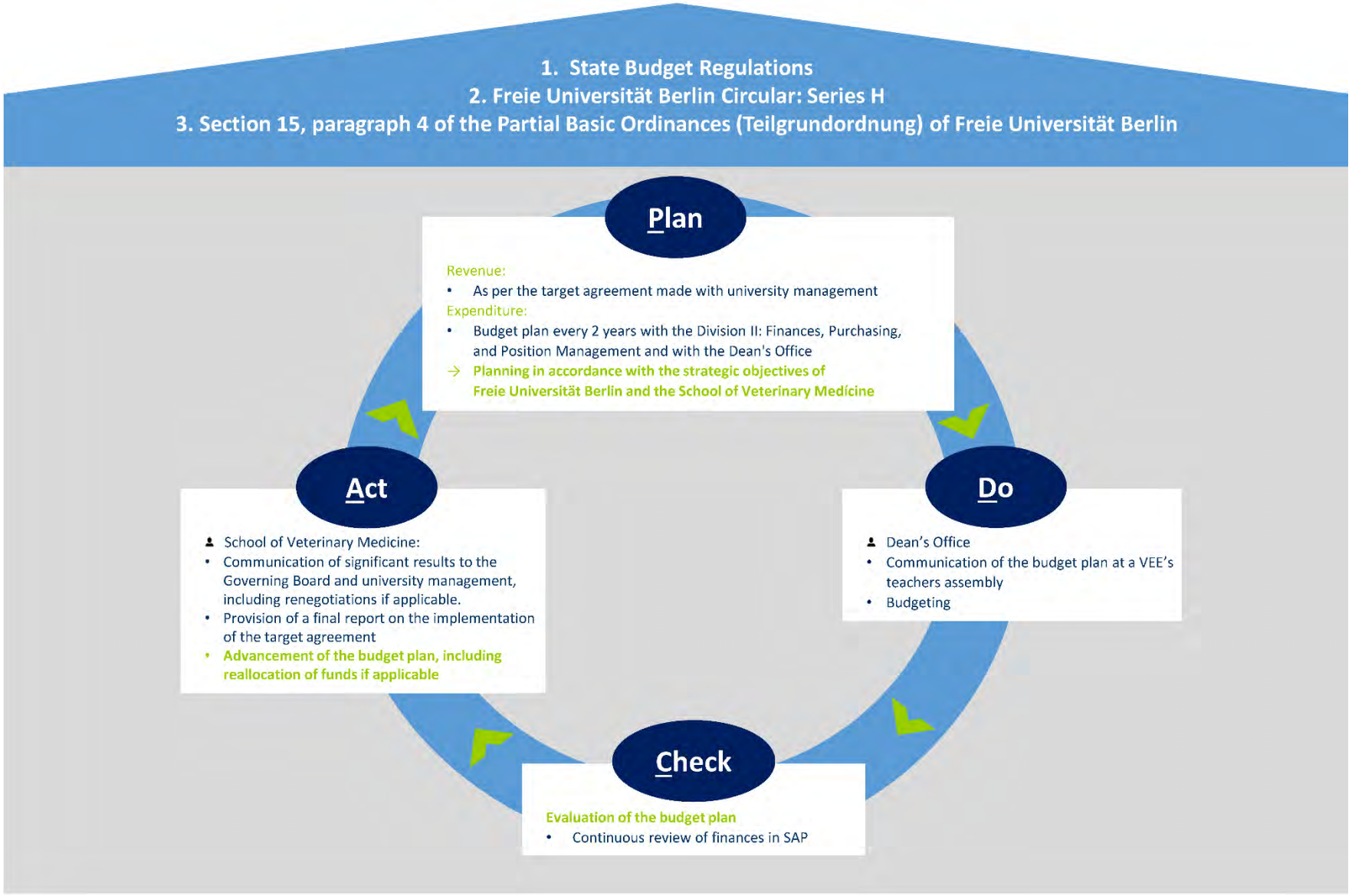


Appendix to 2.1.3.: Schematic Representation of Budget Allocations for Budget Chapters 02, 04 and 06



*OH= Overhead: The overhead funds are managed in chapter 2.

Appendix to 2.1.8: PDCA cycle “Budget Planning of the VEE”



Appendix to 2.2.1.: Budget allocations to scientific units and clinics based on transparent criteria, excluding personnel costs (2023)

Scientific unit 01: Veterinary Anatomy				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	26	6,500 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	2	20,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	8.50	42,500 €
8	Research: Animal facility	5,000 €		0 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**79,000 €**

Scientific unit 02: Veterinary Physiology				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	20	5,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	7.10	35,500 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**65,500 €**

Scientific unit 03: Veterinary Biochemistry				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	16	4,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €	1	5,000 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	6.50	32,500 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**66,500 €**

Scientific unit 04: Animal Nutrition				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	27	6,750 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	6.50	32,500 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**64,250 €**

Scientific unit 05: Virology				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	29	7,250 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €	1	2,000 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	7.15	35,750 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**60,000 €**

Scientific unit 06: Immunology				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	20	5,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	4.00	20,000 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**40,000 €**

Scientific unit 07: Microbiology and Epizootics				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	25	6,250 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	8.00	40,000 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**71,250 €**

Scientific unit 08: Food Safety and Hygiene				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	26	6,500 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	2	20,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €	1	2,000 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	9.00	45,000 €
8	Research: Animal facility	5,000 €		0 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**83,500 €**

Scientific unit 10: Animal Hygiene and Environmental Health				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	19	4,750 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	3.85	19,250 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**39,000 €**

Scientific unit 11: Animal Welfare, Animal Behaviour and Laboratory Animal Science				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	12	3,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	3.00	15,000 €
8	Research: Animal facility	5,000 €		0 €
9	Research: large-scale laboratory	10,000 €		0 €
10	Research: small-scale laboratory	5,000 €	1	5,000 €
	Total			**23,000 €**

Scientific unit 12: Animal Pathology				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	25	6,250 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	9.00	45,000 €
8	Research: Animal facility	5,000 €		0 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**71,250 €**

Scientific unit 13: Parasitology and Tropical Veterinary Medicine				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	22	5,500 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	4.00	20,000 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**50,500 €**

Scientific unit 14: Pharmacology and Toxicology				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	20	5,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €	1	10,000 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	5.00	25,000 €
8	Research: Animal facility	5,000 €	1	5,000 €
9	Research: large-scale laboratory	10,000 €	1	10,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**55,000 €**

Scientific unit 16: Veterinary Epidemiology and Biostatistics				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	12	3,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €		0 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €		0 €
6	Teaching: small-scale animal facility	5,000 €		0 €
7	Research: FTE Academic staff (as per 15 January)	5,000 €	4.50	22,500 €
8	Research: Animal facility	5,000 €		0 €
9	Research: large-scale laboratory	10,000 €		0 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**25,500 €**

Scientific unit 18: Farm Animal Clinic				
No.	**Budget allocation criterion**	**Amount**	**n**	**Total**
1	Continuing and advanced training per head (≥ 0.5 FTE; as per 15 January)	250 €	60	15,000 €
2	Teaching: per mandatory large practical course (according to TAppV)	10,000 €		0 €
3	Teaching: per mandatory small practical course (according to TAppV)	2,000 €		0 €
4	Teaching: clinical training (according to TAppV)	10,000 €	4	40,000 €
5	Teaching: large-scale animal facility, only Farm Animal Clinic	140,000 €	1	140,000 €
6	Teaching: small-scale animal facility	5,000 €	1	5,000 €
7	Research: FTE Academic staff (as per 15 January)	2,000 €	19.00	38,000 €
8	Research: Animal facility	5,000 €	2	10,000 €
9	Research: large-scale laboratory	10,000 €	2	20,000 €
10	Research: small-scale laboratory	5,000 €		0 €
	Total			**268,000 €**

Appendix to 3.1.2.: Main stakeholders that influence the legislative process on veterinary education in Germany

Council of Veterinary Establishments (Veterinärmedizinischer Fakultätentag, VMFT)

https://allgemeiner-fakultaetentag.de/
http://www.vmft.de/

The General Faculty Assembly (Allgemeiner Fakultätentag) is an organisation that unites all German university faculties (departments). Its aim is to discuss and take position on higher education topics across all disciplines, with an emphasis on linking research and education.

The Council of Veterinary Establishments (Veterinärmedizinischer Fakultätentag) is a member of the General Faculty Assembly. Members of the Council of Veterinary Establishments are the five German veterinary schools, the Veterinary University of Vienna (AT) and the Vetsuisse faculties of Bern and Zurich (CH). The assembly meets at least once a year. Each faculty is represented by a delegation of faculty members, academic and technical staff as well as students. Representatives of the veterinary profession, the veterinary chambers as well as the Federal Ministry are invited as guests.

Main topics are the curricular and structural developments within the German speaking veterinary faculties as well as relevant political issues. This includes intended changes of the curriculum.

German Veterinary Chamber (Bundestierärztekammer, BTK) and State Veterinary Chamber of Berlin

http://www.bundestieraerztekammer.de/
http://www.tieraerztekammer-berlin.de/

All licensed veterinarians in Germany are members of the state veterinary chamber in the state where they reside. All state veterinary chambers are members of the German Veterinary Chamber (BTK). The VEE is represented with delegates both in the boards and the assemblies at state and federal level, and representatives of the chambers are invited to attend the meetings of the Council of Veterinary Establishments as well as the “Fachgespräche” in order to receive feedback on educational issues from the profession.

German Veterinary Medical Society (Deutsche Veterinarmedizinische Gesellschaft, DVG)

www.dvg.net

The DVG is the German scientific organization of the veterinary profession with currently > 6000 members. The main objective is to promote veterinary research and to make research results accessable to veterinary practitioners through scientific meetings and publications. The DVG is structured in a wide range of sections (> 40) that represent the various species and disciplines within veterinary medicine.

The VEE is represented both with board and ordinary members in most of those sections, thereby contributing to the advancement of veterinary science in Germany.

Association of Practising Veterinarians (Bundesverband Praktizierender Tierärzte e.V., bpt)
www.tieraerzteverband.de/bpt/

The bpt represents the interests of practicing veterinarians in the Federal Republic of Germany. The purpose of the association is to safeguard the professional, economic and social interests of its ~8000 members. The bpt is actively supporting the efforts of German VEEs to provide placements for and to assure quality of curative extramural practical training.

Federal Association of Civil Servant Veterinarians e. V. (Bundesverband der beamteten Tierärzte e. V., Bbt)
www.amtstierarzt.de/

The Bbt represents all veterinarians in public service and the armed forces, employees and civil servants. The number of members of the regional associations ranges from 1700 to 1800. Membership of the veterinarians is organized through membership of the 16 state associations and the professional organization of veterinarians in the German Armed Forces, which form the extended board of the federal association. The Bbt is actively supporting the efforts of German VEEs to provide placements for and to assure quality of VPH & FSQ extramural practical training.

Appendix to Table 3.1.2.: Assignment of EAEVE subjects to Study Regulations Subjects

Subject	Lecture
Medical physics	Physical Exercises
	Physics (V)
Chemistry (inorganic and organic sections)	Chemistry
	Chemistry Exercises
Animal biology, zoology and cell biology	General Botany
	Zoology
Feed plant biology and toxic plants	Botany of Forage, Poisonous and Medicinal Plants
Biomedical statistics; Information literacy and data management	Biomedical Statistics
Anatomy, histology and embryology	Anatomical Dissection Course I (Dog and Cat)
	Anatomy class II (Ungulates)
	Anatomy class II (Ungulates, Rabbit & Rodents, Birds)
	Anatomy I
	Anatomy II
	Embryology
	General and Special Histology Course I
	General and Special Histology I
	Histology II (Microscopic Anatomy II)
	Histology II (Microscopic Anatomy II) and Embryology Course
	Situs I (Anatomy)
Physiology	Physiological Exercises (4th semester)
	Physiology I
	Physiology II
	Proseminar for Exercises in Physiology
Biochemistry	Biochemical Practical Course
	Biochemistry I
	Biochemistry II
	Seminar for the Biochemistry Practical Course
General and molecular genetics	Animal Breeding and Genetics Incl. Animal Assessment
	Exercises in Animal Breeding and Genetics Incl. Animal Assessment
	Special Animal Breeding and Genetics Incl. Animal Assessment

Pharmacology, pharmacy and pharmacotherapy; Toxicology, Therapy in all common species	EU Regulations on Veterinary Medicinal Products, Controlled Substances, and Medicated Feed
	Galenics (practical course)
	General and Special Pharmacology and Toxicology
	Special Pharmacology and Toxicology
Pathology	General Pathology with Exercises (lecture)
	General Pathology with Exercises (practice)
	Pathologic-Anatomical Demonstrations I
	Pathologic-Anatomical Demonstrations II
	Special Pathology with Exercises (lecture)
	Special Pathology with Exercises (practice)
Parasitology	Parasitological Exercises
	Parasitology Lectures
Microbiology; Zoonoses	Bacteriology and Mycology (practical course)
	General and Special Virology I (V)
	Special Bacteriology and Mycology
	Special Virology II
	Virological Exercises
Immunology	General and Specific Immunology
Epidemiology	Animal Disease Control I
	Animal Epizootic Control II
Professional ethics and communication	Clinical Coaching (EVC)
	Clinical Propaedeutics - Communication
	Cross-sectional Focus on Communication
	Cross-sectional teaching: Module Learning Strategies and Time Management
	History of Veterinary Medicine
	Introduction to the Veterinary Profession
	Medical terminology
Animal health economics and practice management	Cross-sectional teaching: Interdisciplinary Case Work
Animal ethology	Introduction to Animal Welfare Ethics and Law
	Introduction to Behavioral Biology
Animal welfare	Animal Welfare Seminar
	Lecture on Laboratory Animal Science
Animal nutrition	Animal Nutrition
	Feed Science
	Specific Aspects of Animal Nutrition

Obstetrics, reproduction and reproductive disorders	Organ Block 2: Gynaecology / Andrology (OZL)
	Organ Block 6: Birth (OZL)
	Organ Block 14: Udder (OZL)
Diagnostic pathology	Final clinical Rotation – Pathology
Medicine; surgery; anaesthesiology; Therapie in all common species	Anaesthesia and Pain Management
	Clinical Biochemistry and Physiology
	Clinical Laboratory Diagnostics
	Cross-sectional teaching: Interdisciplinary Case Work
	Diseases of Bees and Fish
	Diseases of Reptiles, Amphibians and Pets
	General Ophthalmology (V)
	Organ Block 3: Gastro (OZL)
	Organ Block 4: Liver (OZL)
	Organ Block 5: Kidney (OZL)
	Organ Block 6: Respiratory tract (OZL)
	Organ Block 8: Circulation (OZL)
	Organ Block 9: Blood (OZL)
	Organ Block 10: Movement (OZL)
	Organ Block 11: Nerves (OZL)
	Organ Block 13: Metabolism (OZL)
	Organ Block 15: Skin (OZL)
	Physiology III (4th semester)
	Poultry Diseases
	Surgery - Basic Principles
Clinical practical training in all common domestic animal species	Anesthesia & Intensive Care Block Course
	Clinical and Herd Health Case Presentations in Ruminants, Camelids and Pigs
	Clinical Case Work - Equine
	Clinical Case Work - Farm Anmimals
	Clinical Case Work - Poultry
	Clinical Case Work - Reproduction
	Clinical Case Work - Small and Pet Animals
	Clinical Case Work II- Small and Pet Animals
	Clinical Case Work II - Equine
	Clinical Case Work II - Reproduction
	Final clinical Rotation (Farm Animal Clinic, Small Animal Clinic or Equine Clinic)
	Specialist Coaching and Emergency Medicine
	Surgery Block Course

Preventive medicine	Organ Block 16: System (OZL)
	General Infectious Medicine/General Bacteriology and Mycology
Diagnostic imaging	Clinical Radiology I
	General and Clinical Radiology II
Propaedeutics of all common domestic animal species	Clinical Propaedeutics - Reproduction
	Clinical Propaedeutics - Ruminants, Camelids and Pigs
	Clinical Propaedeutics - Small Animals
	Clinical Propaedeutics -Equine
Animal production, including breeding, husbandry and economics	Agriculture
	Animal Husbandry
	Animal Hygiene and Environmental Health
Herd health management	Herd Health Management
Veterinary legislation, forensic medicine and certification; Veterinary legislation	Forensic Veterinary Medicine
Food hygiene and food microbiology; Inspection and control of food and feed; Food technology including analytical chemistry	Dairy Analysis – Practical Course
	Dairy Hygiene
	Food Hygiene I
	Food Science
	Food Science – Practical Course I
	Meat Hygiene I
	Meat Hygiene II
	Meat Hygiene III
	Practical Course Food Hygiene II
	Practical Course Meat Hygiene and Inspection
Electives (Table 3.1.4)	Electives

Appendix to 3.1.3.: Overview of intra- and extramural clinical training topics and hours offered in the clinical phase of the veterinary curriculum

Year	Sem	Subject	Format	hrs
3	5	Clinical Propaedeutics - Communication	Exercise	14
3	5	Clinical Propaedeutics -Equine	Exercise	21
3	5	Clinical Propaedeutics - Ruminants, Camelids and Pigs	Exercise	21
3	5	Surgery Block Course	Exercise	21
3	5	Clinical Propaedeutics - Reproduction	Exercise	21
3	5	Herd Health Management	Exercise	14
3	5	Clinical Propaedeutics - Small Animals	Exercise	21
3	6	Clinical Case Work - Equine	Exercise	28
3	6	Clinical Case Work - Farm Anmimals	Exercise	14
3	6	Clinical Case Work - Reproduction	Exercise	14
3	6	Clinical Case Work - Small animals and pets	Exercise	28
4	7	Clinical Case Work II - Equine	Exercise	28
4	7	Clinical and Herd Health Case Presentations in Ruminants, Camelids and Pigs	Exercise	14
4	7	Anesthesia & Intensive Care Block Course	Exercise	21
4	7	Clinical Case Work II - Reproduction	Exercise	14
4	7	Clinical Case Work - Small and Pet Animals	Exercise	28
4	8	Clinical Case Work - Poultry	Exercise	28
4	8	General Ophthalmology	Exercise	28
4	8	Specialist Coaching and Emergency Medicine	Exercise	70
5	9	Final clinical Rotation – Pathology	Exercise	56
5	9	Final clinical Rotation (Farm Animal Clinic, Small Animal Clinic or Equine Clinic)	Exercise	280
Total		Intramural clinical training (core)		784
3 to 4	5 to 8	Optional courses proposed to student	Exercise	37.3
Total		Intramural clinical training (core and optional courses)		821

Year	Sem	Subject	Format	Min
3		Short extramural training in veterinary practice	EPT	150
5		Long extramural training in veterinary practice*	EPT	350
Total		Extramural clinical training (EPT)	EPT	500

Total		Clinical training (intra- and extramural)	EPT	1,321

*at least 16 weeks of which at least 350 hrs must be spent in a veterinary practice or clinic

Appendix to 3.1.4.a.: Tabular overview of the course of study

Modules in semester 1	Module-No.	Format	Units*
Physics	20007301	Lectures	2.0
Physical Exercises	20007330	Exercise	2.0
Chemistry	21791b	Lectures	4.0
Zoology	23760a	Lectures	2.0
General Botany	23760b	Lectures	4.0
Medical terminology	08069	Lectures	1.0
Anatomy I	08050	Lectures	2.0
Anatomical Dissection Course I (Dog and Cat)	08052	Exercise	4.0
General and Special Histology I	08060	Lectures	1.0
General and Special Histology Course I	08062	Exercise	2.0
History of Veterinary Medicine	08912	Lectures	1.0
Introduction to the Veterinary Profession	08850	Lectures	1.0
Cross-sectional teaching: Module Learning Strategies and Time Management	08770	Seminars	1.0
Electives (1st Semester)	99991	Seminars	1.5
Modules in semester 2	**Module-No.**	**Format**	**Units***
Chemistry Exercises	21791a	Exercise	3.5
Botany of Forage, Poisonous and Medicinal Plants	08205	Lectures	2.0
Situs I (Anatomy)	08054	Exercise	1.5
Biochemistry I	08150	Lectures	4.0
Seminar for the Biochemistry Practical Course	08152	Seminars	0.5
Agriculture	08210	Lectures	2.0
Animal Breeding and Genetics Incl. Animal Assessment	08215	Lectures	2.0
Special Animal Breeding and Genetics Incl. Animal Assessment	08216	Lectures	2.0
Exercises in Animal Breeding and Genetics Incl. Animal Assessment	08217	Exercise	1.0
Physiology I	08100	Lectures	2.0
Introduction to Behavioral Biology	08550	Lectures	2.0
Introduction to Animal Welfare Ethics and Law	08551	Lectures	2.0
Biomedical Statistics	08780	Lectures	2.0
Cross-sectional Focus on Communication	08083	Lectures	1.0
Electives (2nd Semester)	99992	Seminars	1.5

Modules in semester 3	Module-No.	Format	Units*
Anatomy II	08051	Lectures	2.0
Anatomy class II (Ungulates)	08053	Exercise	4.0
Biochemistry II	08154	Lectures	3.0
Biochemical Practical Course	08151	Exercise	1.5
Proseminar for Exercises in Physiology	08102	Seminars	0.5
Physiology II	08101	Lectures	4.0
Electives (3rd Semester)	99993	Seminars	1.5
Modules in semester 4	**Module-No.**	**Format**	**Units***
Anatomy class II (Ungulates, Rabbit & Rodents, Birds)	08055	Exercise	2.0
Histology II (Microscopic Anatomy II)	08061	Lectures	1.0
Histology II (Microscopic Anatomy II) and Embryology Course	08063	Exercise	2.0
Embryology	08065	Lectures	1.0
Clinical Biochemistry and Physiology	08153	Lectures	1.0
Physiological Exercises (4th semester)	08103	Exercise	2.5
Physiology III (4th semester)	08104	Lectures	1.0
Animal Welfare Seminar	08552	Seminars	2.0
Feed Science	08200	Exercise	2.0
Electives (4th Semester)	99994	Seminars	1.5
Modules in semester 5	**Module-No.**	**Format**	**Units***
Clinical Propaedeutics - Small Animals	08952	Exercise	1.5
Clinical Propaedeutics - Reproduction	08902	Exercise	1.5
Clinical Propaedeutics - Ruminants, Camelids and Pigs	08854	Exercise	1.5
Clinical Propaedeutics -Equine	08802	Exercise	1.5
Clinical Propaedeutics - Communication	08082	Exercise	1.0
Animal Hygiene and Environmental Health	08460	Lectures	2.0
Animal Husbandry	08461	Lectures	2.0
Animal Nutrition	08201	Lectures	2.0
Animal Nutrition	08202	Exercise	2.0
Specific Aspects of Animal Nutrition	08203	Exercise	1.0
General and Special Pharmacology and Toxicology	08700	Lectures	4.0
Clinical Radiology I	08975	Lectures	2.0
General and Special Virology I (V)	08250	Lectures	2.0
General Infectious Medicine/General Bacteriology and Mycology	08350	Lectures	2.0
General and Specific Immunology	08300b	Lectures	2.0
Parasitology Lectures	08650	Lectures	3.0
Surgery Block Course	088820	Exercise	1.5

Surgery - Basic Principles	08812	Lectures	2.0
General Pathology with Exercises (lecture)	08600V	Lectures	3.5
General Pathology with Exercises (practice)	08600Ü	Exercise	0.5
Herd Health Management	08904	Exercise	2.0
Electives (5th Semester)	99995	Seminars	4.0
Modules in semester 6	**Module-No.**	**Format**	**Units***
Special Pharmacology and Toxicology	08701	Lectures	2.0
Special Virology II	08251	Lectures	1.0
Virological Exercises	08253	Exercise	1.0
Special Bacteriology and Mycology	08352	Lectures	1.0
Bacteriology and Mycology (practical course)	08354	Exercise	2.0
Parasitological Exercises	08651	Exercise	2.0
Clinical Laboratory Diagnostics	08953	Exercise	2.0
Meat Hygiene I	08450	Lectures	1.0
Food Hygiene I	08400	Lectures	1.0
Special Pathology with Exercises (lecture)	08601a	Lectures	1.2
Special Pathology with Exercises (practice)	08602a	Exercise	0.5
Dairy Hygiene	08410	Lectures	2.0
Organ Block 2: Gynaecology / Andrology (OZL)	088802	Lectures	2.1
Organ Block 3: Gastro (OZL)	088803	Lectures	2.7
Organ Block 4: Liver (OZL)	088804	Lectures	0.6
Organ Block 5: Kidney (OZL)	088805	Lectures	0.4
Organ Block 6: Respiratory tract (OZL)	088807	Lectures	1.1
Organ Block 8: Circulation (OZL)	088808	Lectures	0.7
Clinical Case Work - Small animals and pets	08950	Exercise	2.0
Clinical Case Work - Reproduction	08900	Exercise	1.0
Clinical Case Work - Farm Anmimals	08851	Exercise	1.0
Clinical Case Work - Equine	08800	Exercise	2.0
Cross-sectional teaching: Interdisciplinary Case Work	08817	Seminars	4.0
Electives (6th Semester)	99996	Seminars	4.0
Modules in semester 7	**Module-No.**	**Format**	**Units***
EU Regulations on Veterinary Medicinal Products, Controlled Substances, and Medicated Feed	08710	Lectures	2.0
Galenics (practical course)	08711	Exercise	1.0
General and Clinical Radiology II	08974	Lectures	1.0
Animal Epizootic Control I	08360	Lectures	1.0
Anesthesia & Intensive Care Block Course	088819	Exercise	1.5
Anaesthesia and Pain Management	08813	Lectures	1.0

Meat Hygiene II	08453	Lectures	1.0
Food Science – Practical Course I	08402	Exercise	2.0
Food Science	08401	Lectures	2.0
Special Pathology with Exercises (practice)	08602	Exercise	0.5
Pathologic-Anatomical Demonstrations I	08605	Exercise	1.0
Special Pathology with Exercises (lecture)	08601	Lectures	1.2
Dairy Analysis – Practical Course	08411	Exercise	2.0
Organ Block 6: Birth (OZL)	088806	Lectures	2.4
Organ Block 9: Blood (OZL)	088809	Lectures	1.4
Organ Block 10: Movement (OZL)	088810	Lectures	2.0
Clinical Case Work - Small and Pet Animals	08951	Exercise	2.0
Clinical Case Work II - Reproduction	08901	Exercise	1.0
Clinical and Herd Health Case Presentations in Ruminants, Camelids and Pigs	08852	Exercise	1.0
Clinical Case Work II - Equine	08801	Exercise	2.0
Cross-sectional teaching: Interdisciplinary Case Work	08777	Seminars	4.0
Clinical Coaching (EVC)	08997	Exercise	1.0
Electives (7th Semester)	99997	Seminars	4.0
Modules in semester 8	**Module-No.**	**Format**	**Units***
Forensic Veterinary Medicine	08815	Lectures	2.0
Lecture on Laboratory Animal Science	08560	Lectures	1.0
Animal Disease Control II	08361	Lectures	2.0
Diseases of Reptiles, Amphibians and Pets	08962	Lectures	1.0
Diseases of Bees and Fish	08963	Lectures	1.0
General Ophthalmology	08954	Exercise	2.0
Meat Hygiene III	08451	Lectures	1.0
Practical Course Meat Hygiene and Inspection	08452	Exercise	3.0
Practical Course Food Hygiene II	08403	Exercise	2.0
Special Pathology with Exercises (practice)	08602c	Exercise	0.5
Pathologic-Anatomical Demonstrations II	08606	Exercise	1.0
Special Pathology with Exercises (lecture)	08601c	Lectures	1.2
Poultry Diseases	08750	Lectures	2.0
Organ Block 11: Nerves (OZL)	088811	Lectures	0.9
Organ Block 13: Metabolism (OZL)	088813	Lectures	1.5
Organ Block 14: Udder (OZL)	088814	Lectures	1.1
Organ Block 15: Skin (OZL)	088815	Lectures	0.8
Organ Block 16: System (OZL)	088816	Lectures	0.6
Clinical Case Work - Poultry	08751	Exercise	2.0
Cross-sectional teaching: Interdisciplinary Case Work	08819	Seminars	4.0

Specialist Coaching and Emergency Medicine	08998	Exercise	5.0
Electives (8th Semester)	99998	Seminars	4.0
Modules in semester 9 & 10	**Module-No.**	**Format**	**Units***
Final clinical Rotation – Pathology	08609	Exercise	4.0
Final clinical Rotation (Farm Animal Clinic, Small Animal Clinic or Equine Clinic)	08803	Exercise	20.0

Total units in curriculum			**275**
Total hours in curriculum			**3,850**

*one unit equals 14 curricular hours

Appendix to 3.1.4.b.: Description of practical training modules

Attendance of the modules described below is mandatory for all students, and regular and successful attendance is a prerequisite for receiving the study credits.

Clinical Propaedeutics
Groups of 45 students at maximum are supervised by several (at least two instructors) to form small effective group sizes. The practical lessons cover the basics of clinical examination techniques in all relevant species. Practical courses are carried out using live animals, cadavers and teaching simulators. Preparatory simulator training is implemented to meet animal welfare requirements. Students are enabled to carry out a full clinical examination including detailed history taking and thorough physical examination of each organ system in horses, large and small ruminants, pigs, dogs, cats and pets. They are able to describe their findings using the correct terminology and differentiate between physiological and pathological examination results. Students are able to apply basic knowledge of diagnostic imaging and diagnostic laboratory techniques as well as on-site tests to choose relevant ancillary examinations for further diagnostics. The clinical propaedeutics also includes four lessons on practical communication training (anamnesis, breaking bad news, conflict situation) using simulation persons, where clinical staff is heavily supported by several institutes (Institutes of Anatomy, Pharmacology, Food Safety and Food Hygiene, Epidemiology and Biostatistics).

Surgery Block Course
After having completed the lecture series “General Surgery”, students prepare for practical classes using the flipped-classroom approach. All students are expected to complete a range of online teaching materials in guided self-study modus, followed by compulsory Q&A sessions with clinicians.
Subsequently, all students take part in small-group practicals at 7 learning stations. Teaching simulators or cadavers are employed to convey the following topics: sterile techniques (scrubbing, gowning, gloving), handling of surgical instruments, wound care & surgical drains, knot tying, suturing and bandaging techniques in different species.

Clinical Laboratory Diagnostics
During this course, principles of the most important laboratory diagnostic examinations of small and pet animals, birds, reptiles, horses and farm animals are presented and practiced in small groups. After completing this course students should know the possible sources of error in interpretation of laboratory results and principles of their identification; know the most important laboratory methods in the mentioned species and be able to interpret analytic results (including laboratory preanalysis, complete blood count, differential cell count, coagulation testing, clinical chemistry, urine analysis, renal function evaluation, acid-base balance, cytology, tracheal wash, liquor analysis, analysis of body cavity effusions, ruminal fluid analysis and laboratory parameters in herd management). They can carry out simple laboratory tests independently (e.g. packed cell volume determination, WBC counting, blood smear evaluation, glucose and total solid measurement, urine analysis including specific gravity, dip stick, sediment analysis, cytology interpretation, handling of cage-side tests and laboratory analysers, ruminal fluid analysis and liver biopsy).

Clinical Case Work
This course encompasses interactive workup of clinical cases (across all relevant species) and herd-health problems in farm animals (either life or using video broadcasting of examination (VetCam) if appropriate). Areas of orthopaedics/surgery, internal medicine and reproductive medicine with general and specific examination approaches and subsequent discussion of diagnoses and treatment options are covered (problem-oriented approach). Students work on clinical cases either together with other students and their senior lecturer or are given specific clinical cases for which they have to present their findings on anamnesis and clinical examination, list of medical conditions, differential diagnoses, diagnostic plan including either apparative or ancillary examinations, evaluation of the findings, creation of a therapy plan and prognostic assessment. They are required to write a case report which is assessed by a clinical instructor. During the presentation of cases to all students, voting tools and other approaches of active student participation are used to engage all attending students into the assessment of cases and related discussions.

Anesthesia & Intensive Care Block Course
After having completed the lecture series “Anesthesia and Pain Management”, students prepare for practical classes using the flipped-classroom approach. All students are expected to complete a range of online teaching materials in self-study modules, followed by compulsory Q&A sessions with clinicians.
Subsequently, all students take part in small-group practical classes at 9 learning stations. Teaching simulators or cadavers are employed to convey the following topics: fluid therapy, pain management, monitoring anesthesia, managing anesthetic emergencies and perioperative complications, emergency ultrasound, regional anesthesia (i.e. nerve blocks), electrocardiography, intubation and resuscitation across species.

Emergency Veterinary Coach (peer-assisted learning in emergency medicine)
At the beginning of their final year of training, all students take part in a mandatory simulator-based emergency veterinary care module. Since the course concept is based on peer-to-peer teaching it is named Emergency Veterinary Coach (EVC). Aim of the didactic concept is to enable students to handle emergency situations and additionally are able to instruct other team members in such situations.
Training for the EVC module begins in the 4th year, with students completing a mandatory clinical coaching course. This practical course on communication skills has a specific focus on situational leadership theory, common leadership styles, constructive feedback and communication/leadership in stressful situations.

To properly prepare students for the practical classes and their corresponding emergency stations, 16 correspondig virtual emergency scenarios are offered at the learning management platform. Students have to study and complete these scenarios before entering the practical class (flipped classroom). The virtual online cases include background information, interactive elements, standard operating procedures, videos of clinical procedures as well as a glossary of relevant technical terms. The online teaching material also includes a virtual pharmacy where students can collect drugs and inform themselves about their proper use.

Before students enter the practical EVC course, students are prepared to act as peer tutors at one practical learning station during an introductory day to each EVC week. The tutors are closely supervised by clinicans during this preparatory period to gain deep theoretical understanding as well as professionality in practical skills at their allocated learning station. The aim of these introductory workshops is for students to fully identify themselves with their allocated learning stations. To achieve this, students are provided with ample opportunity to practice the relevant skills, learn how to use the teaching simulators and discuss any questions they may have about the emergency scenarios with the specialised clinicians.

The complete EVC course constists of 2 weeks of practical classes where students rotate over in total 16 emergency practical training stations. Each station further comprises multiple substations. As such, standard groups of ~ 10 students are subdivided in smaller groups of 2-4 students per substation. As mentioned above, each substation is coached by peer students. 2-4 peer-teaching students have background support by one specialised clinican.

Specific descriptions of EVC learning stations and learning objectives are included in Appendix to 6.3.a.

Final Clinical Rotation

The concept of the final clinical rotation was completely revised after the last EAEVE full visitation. In the final year, students can choose one track of species-specialized clinical rotations (small animal/equine/farm animal). This concept of "tracked" clinical rotations has greatly improved individual participation in clinical duties as compared to previously offered rotation across all animal species. The primary focus of the 10 weeks of clinical rotations is hands-on, animal-side learning and development of "day-one-competencies". The first two weeks is reserved for clinical pathology. Students perform a range of dissections and revisit topics such as laboratory diagnostics, report writing, pathological histology, sample processing and rendering. This enables students to follow non-surviving clinical cases up to pathology during their following weeks in the specialist clinics.

During in-clinics rotation, students are integrated into the daily routines. They examine patients suffering from internal or surgical diseases, or reproductive disorders assigned to them and present the results during morning rounds. Students perform simple diagnostic and therapeutic interventions under supervision and participate in surgical procedures performed on patients. Students on rotation participate in the processes of admission in the animal hospital and accompany the patients during their stay in the clinic for diagnostic work-up, therapy and in-house treatment. According to their level of acquired competencies and the difficulty of the clinical case, students either assist or independently carry out tasks under the guidance of the supervising veterinarian. In addition to the daily routines, students are involved in weekend and emergency on-call services. Students work through cases in a problem-based approach and prepare medical reports that are assessed by the supervising staff. They have practical instructions in diagnostic ultrasound, interpretation of radiographs, lameness examination, local analgesia, surgical hygiene etc. Furthermore, they attend journal clubs. Clinical activities during the final rotations are monitored using logbooks. A short summary of the final rotation concepts of the three clinics is provided in the following (for details see Appendix to 3.1.5.a.)

- **Small Animal Clinic:** Students in the small animal track spend 2 wk in surgery, 2 wk in internal medicine, 1 wk in emergencies and critical care, 1 wk in ophthalmology, 1 wk in reproduction and 1 wk in exotics. The concept aims at a significant intensification of clinical teaching: full integration of students into everyday clinical routine during the clinical rotations,

participation of students in weekend shifts, and extensive practical exercises including an intensive use of the skills lab. Students are encouraged to take responsibility for in-hospital patients (including at least twice daily general medical examinations, and actively participate in the diagnostic and therapeutic measures as well as owner communication). Voting systems and OSCE exams stimulate active participation of each student. Participation in night shift is not felt necessary as the emergency cases seen during days are the same as during nights. A new Division for Reproduction Medicine went into operation in the Small Animal Clinic in the summer of 2017. Because of the more professional and student-centered atmosphere, the case load of small animal reproduction patients could be increased.

- **Equine Clinic:** Students in the equine track typically spend 2 wk in internal medicine, 2 wk in emergencies & anesthesia, 2 wk in orthopaedics & surgery. They also spend 1 wk assisting in general clincial duties such as the stables, the pharmacy and the imaging department. The final week is spent in equine reproduction. A strong integration of students into hospital operations is established. Students are encouraged to take responsibility for in-hospital patients in such a way that they are allocated to selected cases from which they take the medical history directly from the owner, perform a general medical examination in the morning and in the evening and follow all the diagnostic and therapeutic procedures of “their patients” during the day. In the morning rounds they give a brief report on their cases. In between, they are routinely involved in general and special clinical examination in outpatients and emergency cases. Furthermore, the rotation students have the special task to look after in-hospital cases and to take part in the management of emergency cases during night shifts and weekend service. Selected courses during the rotation aim to teach practical skills such as to apply bandages, to identify important antomical structures, to read radiographs, to examine basic orthopedic structures by ultrasound, decision making in emergency situations etc.. Apart from the clinical rotation, all students can subscribe to diagnostic and therapeutic exercises including internal medicine, surgery, orthopaedics, reproduction and neonatology, clinical radiology, physiotherapy, special ophthalmology and tournament veterinary duties. Finally, all students have to submit a comprehensive case report on a common equine problem. For this purpose, they have to examine a case from the hospital, they are fully involved in diagnosing the condition, treatment and aftercare. Afterwards the case is presented to their peers.

- **Farm Animal Clinic:** Students choosing the farm animal track allocate their time to ruminant medicine (surgery and internal medicine; ca. 13 d), ruminant herd health management (4 d), porcine medicine (including surgery, internal and reproduction medicine) and porcine herd health management (10 d), ruminant reproduction (ca. 9 d) and poultry medicine (3 d). Over the course of the 8 weeks, students spend an average of 10 days in outpractice and on farm visits. Whenever possible, students have to examine newly arrived patients on their own (supervised by a clinical staff member). In addition, students actively participate in diagnostic, surgical, orthopaedic and other treatment procedures intramurally and during field visits of the ambulatory service and visits to the cooperative farms (dehorning, evaluation of umbilical health, calf nutrition, lung ultrasound, etc.). Once during the clinical rotation, students actively evaluate housing conditions and management on ruminant and pig farms including aspects of animal welfare. A complex schedule is established, which offers the students a multitude of possibilities for "Hands-on learning".
  Teaching in farm animal reproduction includes mandatory farm excursions, supervised appointments in the Veterinary Skills Net and the processing of clinical cases with oral case presentations. Furthermore, each student participates in the milking of all dairy cows to practice hands-on udder health monitoring techniques and mastitis identification.

Practical teaching in poultry diseases is implemented in the different phases of the curriculum, although to a lesser extent compared to the other clinical units. During the final clinical rotation a farm visit takes place, and the students are also intensively involved in the diagnostic measures of the Unit as well as in the treatment of pet birds.

Auxiliary information on farm animal teaching:

The teaching by the Division for Ruminants and Camelids is strongly based on the philosophy of the "Utrecht Model" to attract students to farm animal medicine at an early stage. In the 3rd year, students have the opportunity to adopt a ruminant from the herd owned by the clinic for one year and care for the animal during this time. By this means, students interested in working with ruminants can get acquainted with animal handling procedures and routine zootechnical procedures (blood sampling in the context of surveillance of infectious diseases, routine and therapeutic hoof trimming, etc). In addition, 3rd and 4th years students are invited to inscribe and take part in the daily clinical rounds of the clinic under the precondition that they contribute to the patient-related discussions. These measures foster continuous engagement in farm animal medicine throughout the clinical part of the study.

The Farm Animal Clinic has several service contracts with large farming operations to support clinical hands-on teaching. Students attend the ambulatory and routine visits to these farms either during herd health management classes, the final clinical rotation or on a voluntary basis. Contracts of the Farm Animal Clinic extend to large farming businesses (dairy cattle, intensive and extensive beef cattle, sheep and goat farming) and pork assisting consultancy. Students are offered to attend in the weekly activities on livestock care (hoof and claw care, treatments, work in the pig or calves stable). In addition, students frequently participate in collecting data in the context of scientific projects e.g. on claw health, dairy herd health, intensive farming and calf health (KlauenFitNet, PräRi, Veredelungsland Sachsen, HE Kalb), and are involved in consultations within the framework of herd health management. Such activities comprise on-site visits and routine work, air quality measurements in the stable, sampling as well as collecting data on health disorders in cattle, swine, small ruminants and camelids.

The Unit for Reproduction Medicine and Udder Health has further cooperation agreements with eight commercial agricultural holdings, including insemination stations that are visited at regular intervals. Three such holdings are visited on a weekly basis, another three every month, and the final once or twice a year in the context of coursework. Students are involved in all these ambulatory visits.

The Unit for Poultry offers students the opportunity to volunteer in vaccination of backyard poultry flocks and day-old chicks; students independently perform history, examination, and vaccination of chickens under the supervision of a veterinarian.

Extramural practical training (EPT) in veterinary practice or clinic

All students have to arrange their two major parts of the curative EPT with experienced veterinary practitioners in the field that have at least two years of independent working experience in veterinary practice and are certified to maintain a veterinary pharmacy. Students during these EPT have to be involved in all tasks related to veterinary practice. They are provided with a list of learning objectives drafted by the establishment academic staff that should be achieved during these EPT, and, enforced by a decision of the Faculty Council, have to complete evaluation forms and logbooks that have to be returned to the Study Office where these are analysed (see also Standard 3.5. of the main SER document).

Appendix to 3.1.5.a.: General overview and detailed student group-based schedules for the different modules of the final clinical rotation

A. General overview

Final clinical rotation: academic years 2021 to 2023

student no.	week 1		week 2		week 2 - 9
1	Supervised participation in the routine **pathology** diagnostics	Fri: **Introduction to clinic**	Rotation through **species-specific clinic**	Fri **Pathology exam**	Rotation through **species-specific clinic** **Pathology** offers opportunity to take part in autopsy that may involve their own clinical patients (after individual consultation)
2					
3					
4					
5					
6					
7					
8					
9					

Final clinical rotation: academic year 2024

student no.	week 1	week 2		week 3 - 10
1	Supervised participation in the routine **pathology** diagnostics	Voluntary, non-individually supervised participation in routine **pathology** diagnostics, self-study, practice time for microscopy	Fri: **Pathology exam**	Rotation through **species-specific clinic** **Pathology** offers opportunity to take part in autopsy that may involve their own clinical patients (after individual consultation)
2				
3				
4				
5				
6				
7				
8				
9				

B.1. Institute of Animal Pathology: Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher	Comments
Monday	8:00 AM	Welcome by the supervising assistants and the section head	max. 9	
		Morning meeting	max. 9	
		Hygiene instructions as well as general instructions/instructions by the attending assistants	max. 9	
		Allocation of plastinates / images for the organ report, Submission by Tuesday at the latest (by e-mail)	max. 9	
		Allocation of topics for the individual short presentations	max. 9	
		"Theory Section"	max. 9	
	10:00 AM	Practical introduction to the dissection technique with performing a dissection on a training animal or, depending on the number of necropsy animals, under the guidance of the assistants on duty, also on the dissection animal itself	max. 6	
		12:30: Diagnostic meeting (presentation of the animals by the assistants on duty) "Show and tell"	max. 6	
	2:00 PM	Elaboration of the organ report	max. 9	
Tuesday	8:00 AM	Morning meeting	max. 9	
		Submission of an executive report	max. 9	
		Discussion of questions related to the online material or otherwise	max. 9	
		Preparation of a short presentation	max. 9	
	10:00 AM	Dissection of practice animals and, if available, “real” necropsy cases	max. 6	
		12:30: Diagnostic meeting (presentation of the animals by the assistants on duty) "Show and tell"	max. 6	
		Alternative macro training (depending on the number of necropsy animals)	max. 9	
	2:00 PM	Discussion of questions related to the online material or otherwise	max. 9	
		Self study (online material, textbooks etc.) or macro training	max. 9	

		Personal support is available during this time, if organizationally possible, by e-mail / telephone for questions	max. 9	
		Preparation of a short presentation	max. 9	
Wednesday	8:00 AM	Morning meeting	max. 9	
		Discussion of questions related to the online material or otherwise	max. 9	
		Preparation of a short presentation	max. 9	
	10:00 AM	Dissection of practice animals and, if available, “real” necropsy cases	max. 6	
		12:30 p.m.: discussion (presentation of the animals by the students) "Show and tell"	max. 6	
		Alternative macro training (depending on the number of necropsy animals)	max. 9	
	2:00 PM	Return of the organ reports by the supervisors with discussion of general and specific questions as well as content/formal feedback on the reports	max. 9	
		Self study (online material, textbooks etc.) or macro training	max. 9	
		Personal support is available during this time, if organizationally possible, by e-mail / telephone for questions	max. 9	
		Short presentations (each about 5 minutes followed by a short discussion of about 2 minutes each)	max. 9	
Thursday	8:00 AM	Morning meeting	max. 9	
		Discussion of questions related to the online material or otherwise	max. 9	
	10:00 AM	Dissection of practice animals and, if available, “real” necropsy cases	max. 6	
		12:30 p.m.: discussion (presentation of the animals by the students)	max. 6	
		Alternatively: macro training (depending on the number of necropsies)	max. 9	
	2:00 PM	Self study (online material, textbooks etc.) or macro training	max. 9	
		Personal support is available during this time, if organizationally possible, by e-mail / telephone for questions	max. 9	
		Short presentations (each about 5 minutes followed by a short discussion of about 2 minutes each)	max. 9	

Friday	**8:00 AM**	**Morning meeting**	**max. 9**	**extra week from the academic year 2024**
		Discussion of questions related to the online material or otherwise	max. 9	
		Documentation: Logbooks and evaluation forms must be completed and submitted (in person or in the mailbox) by Friday at the latest	max. 9	
	10:00 AM	Dissection of practice animals and, if available, “real” necropsy cases	max. 6	
		12:30 p.m.: discussion (presentation of the animals by the students) "Show and tell"	max. 6	
		Alternatively: macro training (depending on the number of necropsies)	max. 9	
	2:00 PM	Self study (online material, textbooks etc.) or macro training	max. 9	
		Personal support is available during this time, if organizationally possible, by e-mail / telephone for questions	max. 9	
		Short presentations (each about 5 minutes followed by a short discussion of about 2 minutes each)	max. 9	
Monday to Thursday	variable	Possibility to participate in all diagnostic activities in the institute based on the procedure of the previous week, possibility for self-study, microscopy, literature work, ...	max. 9	
Friday	variable	Practical part of the exam		
Subsequent weeks in the clinics	variable	Opportunity to take to participate in autopsy that may involve their own clinical patients (after individual consultation)	max. 2	

C.1. Farm Animal Clinic: Overview of the final clinical rotation

Group A1								
Day	Week 1		Week 2		Week 3		Week 4	
	Group A1-A	Group A1-B	Group A1-A	Group A1-B	Group A1-A	Group A1-B	Group A1-A	Group A1-B
1	Cattle		Cattle	Pig	Cattle	Pig	Reproduction	
2	Cattle	Reproduction	Cattle	Pig	Cattle	Reproduction	Reproduction	
3	Cattle	Reproduction	Cattle	Reproduction	Cattle	Pig	Reproduction	
4	Cattle	Reproduction	Cattle	Pig	Cattle	Pig	Repro	Cattle
5	Cattle		Cattle	Pig	Cattle	Pig	Reproduction	
6	Emergency Service		Emergency Service		Emergency Service		Emergency Service	
7	Emergency Service		Emergency Service		Emergency Service		Emergency Service	

Group A1								
Day	Week 5		Week 6		Week 7		Week 8	
	Group A1-A	Group A1-B	Group A1-A	Group A1-B	Group A1-A	Group A1-B	Group A1-A	Group A1-B
1	Pig	Cattle	Pig	Cattle	Cattle		Pig	
2	Pig	Cattle	Reproduction	Cattle	Reproduction		Poultry	
3	Reproduction	Cattle	Pig	Cattle	Reproduction		Poultry	
4	Pig	Cattle	Pig	Cattle	Reproduction		Poultry	
5	Pig	Cattle	Pig	Cattle	Cattle		Pig	
6	Emergency Service		Emergency Service		Emergency Service		Emergency Service	
7	Emergency Service		Emergency Service		Emergency Service		Emergency Service	

C.2. Farm Animal Clinic: Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
10 2020 - 09 2021			
1	8 am - noon	1st Introduction of participants and supervisors	max. 10
		2nd Instructions hygiene management, avoidance of spread of infection, biosecurity measures	max. 10
		3rd Assignment to groups, schedules of activities intramurally and extramurally, schedules of farm visits, participation in emergency services at night (up to 10 o'clock p.m.) and in the weekend (8.00-12.00 o'clock)	max. 10
		4th Instructions on work safety, data security, potentially hazardous substances, animal handling	max. 10
		5th assignment of lockers, distribution of clothing (coveralls)	max. 10
	12:30 - 4:30 pm	Round tour of the clinic, instructions on patient presentation during morning rounds and on preparation of written case reports	max. 10
2	8 am - noon	Refresher hands-on training in clinical examination techniques and therapeutical interventions in cattle	max. 10
3	8 am - noon	Hands-on training in Unit for Reproduction Medicine and Udder Health	max. 10
3	1 pm - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in small ruminants and new world camelids	max. 10
4	8 am - 4 pm	Herd health management (basics, key figures, software applications)	max. 10
5	8 am - noon	Herd health management (advanced, preparation of farm visits)	max. 5
weekend	8 am - noon	Routine work patient care, emergencies (one day in the weekend during rotation)	two
emergency services	4 pm - 10 pm	participation in on-call emergency services (hands-on)	two
8		Unit for Reproduction Medicine and Udder Health	max. 10
9		Unit for Reproduction Medicine and Udder Health	max. 10
10		Unit for Reproduction Medicine and Udder Health	max. 10
11	8 am - 4 pm	farm visit herd health management	max. 5

12	1 pm - 4 pm	hands-on training in bovine orthopaedics, functional hoof trimming, block application, regional anaesthesia (dummy), orthopaedic surgery (cadaver material)	max. 10
weekend	8 am - 4 pm	Routine work patient care, emergencies (one day in the weekend during rotation)	max. 2
15	8 am - 11 am	laboratory analyses; hands-on training in use of "cow-side" tests and laboratory equipment in student and emergency laboratory of the clinic, instruction and organization of the veterinary pharmacy in the clinic inclusive software application	max. 10
15	noon - 4 pm	assignment of patients for follow-up and written medical report (ruminant or pig)	max. 10
16	8 am - 4 pm	Group B: patient care; hands-on experience in veterinary clinic either for ruminants and new world camelids (Group B) or for pigs (Group A), clinical examination, sampling, posting of materials, interpretation of laboratory results (hematology and blood biochemistry, microbiology, serology, necropsies), application of diagnostic ultrasound, endoscopy, interpretation of x-ray images, patient record keeping software application, patient presentation at the morning rounds, participation in ambulatory services (2-3 students)	max. 5
16	8 am - 4 pm	Group A: Division for Pigs - refresher propaedeutics, patient care and participation in ambulatory service	max. 5
17	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants an new world camelids as described above	max. 5
17	8 am - 4 pm	Group A: Division for Pigs - hands-on training anaesthesia and castration / patient care and participation in ambulatory service	max. 5
18	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids as described above	max. 5
18	8 am - 4 pm	Group A: Division for Pigs - hands-on training gynaecology / patient care and participation in ambulatory service	max. 5
19	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids as described above	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
22	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
22	8 am - 4 pm	Group B: Division for Pigs - refresher propaedeutics, patient care and participation in ambulatory service	max. 5

23	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
23	8 am - 4 pm	Group B: Division for Pigs - hands-on training anaesthesia and castration / patient care and participation in ambulatory service	max. 5
24	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
24	8 am - 4 pm	Group B: Division for Pigs - hands-on training gynaecology / patient care and participation in ambulatory service	max. 5
25	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
25	8 am - 4 pm	Group B: Division for Pigs - herd visit, herd health management	max. 5
26	8 am - 4 pm	Group A farm visit, herd health visit	max. 5
26	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
29		education in Unit for Reproduction Medicine and Udder Health	max. 10
30		education in Unit for Reproduction Medicine and Udder Health	max. 10
31		education in Division for Poultry	max. 10
32	8 am - 4 pm	farm visit, herd health management	max. 5
32	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
33	8 am - 4 pm	farm visit, bovine orthopaedics hands-on training	max 5
33	8 am - 4 pm	Division for Poultry	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
36	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
36	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
37	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
37	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
38	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5

38	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
39	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
39	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
40	8 am - 4 pm	Group A: farm visit herd health visit	max. 5
40	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
43	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
43	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
44	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
44	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
45	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
45	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
46	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
46	8 am - 4 pm	Group B: herd health management farm visit	max. 5
47	8 am - 4 pm	Presentation cases cattle, pigs, farm problems, selected topics	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
50	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
51	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
52	8 am - 4 pm	farm visit, bovine orthopaedics, hand-on training	max. 5
52	8 am - 4 pm	farm visit, herd health management	max. 5
53	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
53	8 am - 4 pm	Division for Poultry	max. 5
54	8 am - noon	Division for Poultry	max. 10
54	noon - 4 pm	Resumée and evaluation of all participating institutions	max. 10

10 2021 - 04 2022			
1	8 am - noon	1st Introduction of participants and supervisors	max. 10
		2nd Instructions hygiene management, avoidance of spread of infection, biosecurity measures	max. 10
		3rd Assignment to groups, schedules of activities intramurally and extramurally, schedules of farm visits, participation in emergency services at night (up to 10 o'clock p.m.) and in the weekend (8.00-12.00 o'clock)	max. 10
		4th Instructions on work safety, data security, potentially hazardous substances, animal handling	max. 10
		5th assignment of lockers, distribution of clothing (coveralls)	max. 10
	12:30 - 4:30 p.m.	Round tour of the clinic, instructions on patient presentation during morning rounds and on preparation of written case reports	max. 10
2	8 am - noon	Hands-on training in Unit for Reproduction Medicine and Udder Health	max. 10
2	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in cattle	max. 10
3	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 10
3	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in small ruminants and new world camelids	max. 10
4	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
5	8 am - 4 pm	Introduction Clinic, Software, Hands-on training in bovine orthopaedics, functional hoof trimming, block application (cadaver), regional anaesthesia (dummy)	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
8	8 am - 4 pm	Group A: Division for Pigs - refresher propaedeutics, patient care and participation in ambulatory service	max. 5
8	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
9	8 am - 4 pm	Group A: Farm visit herd health management Bovine Respiratory Disease Complex	max. 5
9	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
10	8 am - 4 pm	Group A: Division for Pigs - hands-on training anaesthesia and castration / patient care and participation in ambulatory service	max. 5
10	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5

11	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants an new world camelids as described above	max. 5
11	8 am - 4 pm	Group A: Division for Pigs - hands-on training gynaecology / patient care and participation in ambulatory service	max. 5
12	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids as described above	max. 5
12	8 am - 4 pm	Group A: Division for Pigs - herd visit (herd health management)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
15	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
16	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
16	8 am - 4 pm	Farm visit Herd Health Management	max. 5
17	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
17	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
18	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
18	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
19	8 am - 4 pm	Group B: Division for Pigs - herd visit (herd health management)	max. 5
19	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
22	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
23	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
23	8 am - 4 pm	Farm visit, Herd Health Management	max. 5
24	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5

24	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
25	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
25	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
26	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
29	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
29	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
30	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
30	8 am - 4 pm	Farm visit, Herd Health Management	max. 5
31	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
31	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
32	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
32	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
33	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
33	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
35	8 am - 4 pm	Herd Health Management performance indicator figures	max 10
36	8 am - 4 pm	Division for Poultry	max. 10
37	8 am - 4 pm	Division for Poultry	max. 10
38	8 am - 4 pm	Division for Poultry	max. 10
39	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
42	8 am - 4 pm	Division for Pigs - patient care and participation in ambulatory service	max. 10
43	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 10

44	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 5
44	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 5
45	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 5
45	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 5
46	8 am - noon	Division for Pigs	max. 10
46	noon - 4 pm	Resumée and evaluation of all participating institutions	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2

04 2022 - 09 2022			
1	8 am - noon	1st Introduction of participants and supervisors	max. 10
		2nd Instructions hygiene management, avoidance of spread of infection, biosecurity measures	max. 10
		3rd Assignment to groups, schedules of activities intramurally and extramurally, schedules of farm visits, participation in emergency services at night (up to 10 o'clock p.m.) and in the weekend (8.00-12.00 o'clock)	max. 10
		4th Instructions on work safety, data security, potentially hazardous substances, animal handling	max. 10
		5th assignment of lockers, distribution of clothing (coveralls)	max. 10
	12:30 - 4:30 p.m.	Round tour of the clinic, instructions on patient presentation during morning rounds and on preparation of written case reports	max. 10
2	8 am - noon	Refresher hands-on training in clinical examination techniques and therapeutical interventions in cattle	max. 10
2	noon - 4 pm	Hands-on training in Unit for Reproduction Medicine and Udder Health	max. 10
3	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 10
3	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in small ruminants and new world camelids	max. 10
4	8 am - 4 pm	Group A: Farm visit - Herd Health Management	max. 5
		Group B: Unit for Reproduction Medicine and Udder Health	max. 5
5	8 am - 4 pm	Introduction practical training in clinical laboratory diagnostics, recording of drugs and therapeutis	max. 10

weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
8	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
8	8 am - 4 pm	Group B: Group B: Division for Pigs - Refresher propaedeutics including practical training, hands-on training blood sampling, sample processing and hematology / patient care and participation in ambulatory service	max. 5
9	8 am - 4 pm	Group A: Farm visit herd health management	max. 5
9	8 am - 4 pm	Group B: Division for Pigs - hands-on training in gynaecology and andrology / patient care and participation in ambulatory service	max. 5
10	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
10	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
11	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
11	10 am - 4 pm	Group B: Division for Pigs - Seminars on vaccination and herd health management, preparing for herd visit	max. 5
12	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
12	6 am - 3 pm	Group B: Division for Pigs - Practical training herd visit (including herd examination, individual examination, vaccination, blood sampling, treatments, consultancy)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
15	8 am - 4 pm	Group B: Division for Pigs - hands-on training in anaesthesia, castration; training on biopsy sampling, sample processing and cytology / patient care and participation in ambulatory service	max. 5
16	8 am - 4 pm	Group A: Farm visit herd health management	max. 5
16	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
17	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5

17	8 am - 4 pm	Group B: Division for Pigs - hands-on training in claw and tusk trimming / patient care and participation in ambulatory service	max. 5
18	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
18	6 am - 12 pm	Group B: Division for Pigs - practical field training in ASF combat	max. 5
19	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
18	8 am - 4 pm	Group B: Division for Pigs - practical training in laboratory diagnostics, evaluation of hematology and cytology samples and results	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
22	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
23	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
24	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
25	8 am - 4 pm	Group B: Farm visit - Herd Health Management	max. 5
25	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
26	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
29	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
29	8 am - 4 pm	Group A: Group B: Division for Pigs - Refresher propaedeutics including practical training, hands-on training blood sampling, sample processing and hematology / patient care and participation in ambulatory service	max. 5
30	8 am - 4 pm	Group B: Farm visit herd health management	max. 5
30	8 am - 4 pm	Group A: Division for Pigs - hands-on training in gynaecology and andrology / patient care and participation in ambulatory service	max. 5
31	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
31	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
32	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5

32	10 am - 4 pm	Group A: Division for Pigs - Seminars on vaccination and herd health management, preparing for herd visit	max. 5
33	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
33	6 am - 3 pm	Group A: Division for Pigs - Practical training herd visit (including herd examination, individual examination, vaccination, blood sampling, treatments, consultancy)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
35	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
35	8 am - 4 pm	Group A: Division for Pigs - hands-on training in anaesthesia, castration; training on biopsy sampling, sample processing and cytology / patient care and participation in ambulatory service	max. 5
36	8 am - 4 pm	Group B: Farm visit herd health management	max. 5
36	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
37	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
37	8 am - noon	Group A: Division for Pigs - hands-on training in claw and tusk trimming / patient care and participation in ambulatory service	max. 5
38	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
38	6 am - 12 pm	Group A: Division for Pigs - practical field training in ASF combat	max. 5
39	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
39	8 am - noon	Group A: Division for Pigs - practical training in laboratory diagnostics, evaluation of hematology and cytology samples and results	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
45	8 am - 4 pm	Division for Pigs - Presentation of herd case and individual case / Problem Based Learning in herd health management (Part I)	max. 10
46	8 am - 4 pm	Division for Poultry	max. 10
47	8 am - 4 pm	Division for Poultry	max. 10
48	8 am - 4 pm	Division for Poultry	max. 10

49	8 am - 4 pm	Division for Pigs - Problem Based Learning in herd health management (Part II) / General debriefing	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2

10 2022 - 04 2023			
1	8 am - noon	1st Introduction of participants and supervisors	max. 10
		2nd Instructions hygiene management, avoidance of spread of infection, biosecurity measures	max. 10
		3rd Assignment to groups, schedules of activities intramurally and extramurally, schedules of farm visits, participation in emergency services at night (up to 10 o'clock p.m.) and in the weekend (8.00-12.00 o'clock)	max. 10
		4th Instructions on work safety, data security, potentially hazardous substances, animal handling	max. 10
		5th assignment of lockers, distribution of clothing (coveralls)	max. 10
	12:30 - 4:30 p.m.	Round tour of the clinic, instructions on patient presentation during morning rounds and on preparation of written case reports	max. 10
2	8 am - noon	Hands-on training in Unit for Reproduction Medicine and Udder Health	max. 10
2	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in cattle	max. 10
3	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 10
3	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in small ruminants and new world camelids	max. 10
4	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
5	8 am - 4 pm	Introduction Clinic, Software, Hands-on training in bovine orthopaedics, functional hoof trimming, block application (cadaver), regional anaesthesia (dummy)	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
8	8 am - 4 pm	Group A: Division for Pigs - refresher propaedeutics, patient care and participation in ambulatory service	max. 5
8	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
9	8 am - 4 pm	Group A: Farm visit, herd health management Bovine Respiratory Disease Complex	max. 5

9	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
10	8 am - 4 pm	Group A: Division for Pigs - hands-on training anaesthesia and castration / patient care and participation in ambulatory service	max. 5
10	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
11	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants an new world camelids as described above	max. 5
11	8 am - 4 pm	Group A: Division for Pigs - hands-on training gynaecology / patient care and participation in ambulatory service	max. 5
12	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids as described above	max. 5
12	8 am - 4 pm	Group A: Division for Pigs - herd visit (herd health management)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
15	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
16	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
16	8 am - 4 pm	Farm visit, Herd Health Management	max. 5
17	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
17	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
18	8 am - 4 pm	Group B: Division for Pigs - patient care and participation in ambulatory service	max. 5
18	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
19	8 am - 4 pm	Group B: Division for Pigs - herd visit (herd health management)	max. 5
19	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
22	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10

23	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
23	8 am - 4 pm	Farm visit, Herd Health Management	max. 5
24	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
24	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
25	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
25	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 5
26	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
29	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
29	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
30	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
30	8 am - 4 pm	Farm visit, Herd Health Management	max. 5
31	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
31	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
32	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
32	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
33	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
33	8 am - 4 pm	Group A: Division for Pigs - patient care and participation in ambulatory service	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
35	8 am - 4 pm	Herd Health Management, performance indicator figures	max 10
36	8 am - 4 pm	Division for Poultry	max. 10
37	8 am - 4 pm	Division for Poultry	max. 10

38	8 am - 4 pm	Division for Poultry	max. 10
39	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
42	8 am - 4 pm	Division for Pigs - patient care and participation in ambulatory service	max. 10
43	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 10
44	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 5
44	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 5
45	8 am - 4 pm	patient care and participation in ambulatory service ruminants and new world camelids	max. 5
45	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 5
46	8 am - noon	Division for Pigs	max. 10
46	noon - 4 pm	Resumée and Evaluation all participating institutions	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2

04 2023 - 09 2023			
1	8 am - noon	1st Introduction of participants and supervisors	max. 10
		2nd Instructions hygiene management, avoidance of spread of infection, biosecurity measures	max. 10
		3rd Assignment to groups, schedules of activities intramurally and extramurally, schedules of farm visits, participation in emergency services at night (up to 10 o'clock p.m.) and in the weekend (8.00-12.00 o'clock)	max. 10
		4th Instructions on work safety, data security, potentially hazardous substances, animal handling	max. 10
		5th assignment of lockers, distribution of clothing (coveralls)	max. 10
	12:30 - 4:30 p.m.	Round tour of the clinic, instructions on patient presentation during morning rounds and on preparation of written case reports	max. 10
2	8 am - noon	Refresher hands-on training in clinical examination techniques and therapeutical interventions in cattle	max. 10
2	noon - 4 pm	Hands-on training in Unit for Reproduction Medicine and Udder Health	max. 10
3	8 am - noon	Unit for Reproduction Medicine and Udder Health	max. 10

3	noon - 4 pm	Refresher hands-on training in clinical examination techniques and therapeutical interventions in small ruminants and new world camelids	max. 10
4	8 am - 4 pm	Group A: Farm visit - Herd Health Management	max. 5
		Group B: Unit for Reproduction Medicine and Udder Health	max. 5
5	8 am - 4 pm	Introduction practical training in clinical laboratory diagnostics, recording of drugs and therapeutis	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
8	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
8	8 am - 4 pm	Group B: Group B: Division for Pigs - Refresher propaedeutics including practical training, hands-on training blood sampling, sample processing and hematology / patient care and participation in ambulatory service	max. 5
9	8 am - 4 pm	Group A: Farm visit herd health management	max. 5
9	8 am - 4 pm	Group B: Division for Pigs - hands-on training in gynaecology and andrology / patient care and participation in ambulatory service	max. 5
10	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
10	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
11	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
11	10 am - 4 pm	Group B: Division for Pigs - Seminars on vaccination and herd health management, preparing for herd visit	max. 5
12	8 am - 4 pm	Group A: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
12	6 am - 3 pm	Group B: Division for Pigs - Practical training herd visit (including herd examination, individual examination, vaccination, blood sampling, treatments, consultancy)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
15	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5

15	8 am - 4 pm	Group B: Division for Pigs - hands-on training in anaesthesia, castration; training on biopsy sampling, sample processing and cytology / patient care and participation in ambulatory service	max. 5
16	8 am - 4 pm	Group A: Farm visit, herd health management	max. 5
16	8 am - 4 pm	Group B: Unit for Reproduction Medicine and Udder Health	max. 5
17	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
17	8 am - 4 pm	Group B: Division for Pigs - hands-on training in claw and tusk trimming / patient care and participation in ambulatory service	max. 5
18	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
18	6 am - 12 pm	Group B: Division for Pigs - practical field training in ASF combat	max. 5
19	8 am - 4 pm	Group A: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
18	8 am - 4 pm	Group B: Division for Pigs - practical training in laboratory diagnostics, evaluation of hematology and cytology samples and results	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
22	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
23	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
24	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
25	8 am - 4 pm	Group B: Farm visit - Herd Health Management	max. 5
25	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
26	8 am - 4 pm	Unit for Reproduction Medicine and Udder Health	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
29	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
29	8 am - 4 pm	Group A: Group B: Division for Pigs - Refresher propaedeutics including practical training, hands-on training blood sampling, sample processing and hematology / patient care and participation in ambulatory service	max. 5
30	8 am - 4 pm	Group B: Farm visit, herd health management	max. 5

30	8 am - 4 pm	Group A: Division for Pigs - hands-on training in gynaecology and andrology / patient care and participation in ambulatory service	max. 5
31	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
31	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
32	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
32	10 am - 4 pm	Group A: Division for Pigs - Seminars on vaccination and herd health management, preparing for herd visit	max. 5
33	8 am - 4 pm	Group B: patient care and participation in ambulatory service ruminants and new world camelids	max. 5
33	6 am - 3 pm	Group A: Division for Pigs - Practical training herd visit (including herd examination, individual examination, vaccination, blood sampling, treatments, consultancy)	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
35	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
35	8 am - 4 pm	Group A: Division for Pigs - hands-on training in anaesthesia, castration; training on biopsy sampling, sample processing and cytology / patient care and participation in ambulatory service	max. 5
36	8 am - 4 pm	Group B: Farm visit, herd health management	max. 5
36	8 am - 4 pm	Group A: Unit for Reproduction Medicine and Udder Health	max. 5
37	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
37	8 am - noon	Group A: Division for Pigs - hands-on training in claw and tusk trimming / patient care and participation in ambulatory service	max. 5
38	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5
38	6 am - 12 pm	Group A: Division for Pigs - practical field training in ASF combat	max. 5
39	8 am - 4 pm	Group B: patient care and participation in ambulatory service in ruminants and new world camelids	max. 5

39	8 am - noon	Group A: Division for Pigs - practical training in laboratory diagnostics, evaluation of hematology and cytology samples and results	max. 5
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2
45	8 am - 4 pm	Division for Pigs - Presentation of herd case and individual case / Problem Based Learning in herd health management (Part I)	max. 10
46	8 am - 4 pm	Division for Poultry	max. 10
47	8 am - 4 pm	Division for Poultry	max. 10
48	8 am - 4 pm	Division for Poultry	max. 10
49	8 am - 4 pm	Division for Pigs - Problem Based Learning in herd health management (Part II) / General debriefing	max. 10
weekend	8 am - noon	patient care, emergencies (one day in the weekend during rotation)	2

*participation of students during emergency services in late hours (until 10 pm from Mo - Fri) takes place in accordance with the regulations of the German Protection at Work Act; students participate in at least 1 late hour shift and one weekend.

C.3. Farm Animal Clinic – Unit for Reproduction Medicine and Udder Health: Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
week 1			
1	morning	introduction & overview of the clinical rotations, clinic tour	6 to 9
2	morning	cycle of the cow (work on simulators)	6 to 9
3	morning	diagnostic of udder diseases in cows	6 to 9
4	morning	reproduction in small ruminants	6 to 9
4	afternoon	gynaecologic examination of cows (transrectal palpation and ultrasound; theoretical and practical unit)	6 to 9
week 2			
2	morning + afternoon	Trip to 2 farms (fresh cow management; calf health: blood sampling, debudding)	3 to 4 (half of the group)
4	morning	andrology course: castration	3 to 4 (half of the group)
4	afternoon	reproductive management and hormonal treatments in dairy cows	3 to 4 (half of the group)
5	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
week 3			
4	morning	skills lab (self-study)	3 to 4 (half of the group)
4	afternoon	fetotomy course	3 to 4 (half of the group)

5	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
week 4			
2	morning	skills lab (self-study)	3 to 4 (half of the group)
2	afternoon	fetotomy course	3 to 4 (half of the group)
3	morning	andrology: sperm collection of a bull and spermatology in the lab	6 to 9
3	afternoon	neonatology: examination and debudding	6 to 9
4	morning	c-section course (work on simulators)	6 to 9
4	afternoon	case reports	6 to 9
week 5			
1	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
2	morning + afternoon	Trip to 2 farms (fresh cow management; calf health: blood sampling, debudding)	3 to 4 (half of the group)
4	morning	andrology: castration course	3 to 4 (half of the group)
4	afternoon	reproductive management and hormonal treatments in dairy cows	3 to 4 (half of the group)
5	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
week 6			
4	morning	herd health management: udder health	3 to 4 (half of the group)
4	afternoon	herd health management: udder health: trip to German Federal Institute for Risk Assessment)	3 to 4 (half of the group)

5	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
week 7			
2	morning	herd health management: udder health	3 to 4 (half of the group)
2	afternoon	herd health management: udder health: trip to German Federal Institute for Risk Assessment)	3 to 4 (half of the group)
5	morning + afternoon	Trip to 1 farm (pregnancy diagnosis, puerperal control)	3 to 4 (half of the group)
week 8			
5	afternoon	evaluation of the clinical rotations	6 to 9

C.4. Farm Animal Clinic - Division for Poultry:
Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
1	9.00-16.00	Introduction and clinical propaedeutics poultry (chicken/pigeon) (hands-on)	8-10 students/teacher
2	09.00-13.00	Poultry health management (theory), if applicable visit of small holder hobby farms (hands-on)	8-10 students/teacher
2	14.00-16.30	Necropsy (hands-on)	8-10 students/teacher
3	9.00-13.00	Laboratory diagnostics training (hands-on)	8-10 students/teacher
3	14.00-16.00	Case review	8-10 students/teacher

D.1. Equine Clinic: Overview of the final clinical rotation

Group A1								
No.	**Week 01**	**Week 02**	**Week 03**	**Week 04**	**Week 05**	**Week 06**	**Week 07**	**Week 08**
1	Reproduction	Introductory week	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine
2	Reproduction	Introductory week	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine
3	Reproduction	Introductory week	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine
4	Reproduction	Introductory week	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery
5	Reproduction	Introductory week	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery
6	Reproduction	Introductory week	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia	Orthopedics/ Surgery	Orthopedics/ Surgery
7	Reproduction	Introductory week	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia
8	Reproduction	Introductory week	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia
9	Reproduction	Introductory week	Orthopedics/ Surgery	Orthopedics/ Surgery	Internal medicine	Internal medicine	Emergency/ Anaesthesia	Emergency/ Anaesthesia

D.2. Equine Clinic: Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
Monday / Introductory week	08:00	Handing over of clothing, introduction to the rooms, organisation and procedures, safety briefing	9
Monday / Introductory week	late morning	clinical work	9
Monday / Introductory week	14.30	diagnostical workup of the gastrointestinal tract (internal medicine room, research animal)	9
Monday / Introductory week		tutorial intensive care	9
Tuesday / Introductory week	8.00	Radiology and clinical rounds	9
Tuesday / Introductory week	late morning	clinical work	9
Tuesday / Introductory week	14.00	diagnostical workup of the respirqatory tract (internal medicine room, healthy research animal)	9
Tuesday / Introductory week		ultrasonography course (ultrasonography room, research animal)	9
Wednesday / Introductory week	8.00	Radiology and clinical rounds	9
Wednesday / Introductory week	late morning	clinical work	9
Wednesday / Introductory week	14.00	diagnostical workup of the respirqatory tract II (internal medicine room, healthy research animal)	9
Wednesday / Introductory week		tutorial laboratory work and cytology tutorial intensive care	9
Thursday / Introductory week	8.00	Radiology and clinical rounds	9

Thursday / Introductory week	9.00	applied anatomy (stable; healthy horses)	9
Thursday / Introductory week		course diagnostic abnesthesia of the distal limb (wetlab room, cadaverlimbs)	9
Friday / Introductory week	8.00	Radiology and clinical rounds	9
Friday / Introductory week	11.00	bandage course (in the skills lab)	9
Friday / Introductory week	14.00	Tutorial diagnostic anesthesia	9
Monday to Friday / Other weeks	8.00	Radiology and clinical rounds	6
	late morning and afternoon	clinical work (includes clinical workup of patients, diagnostic imaging, development of therapeutical plans, participation in surgeries, care of inpatients)	3
	16.00	clinical rounds	9
	16.00-8.00	emergency service	3
Wednesday	07:15	Journal Club/Surgery	3
Thursday	08:00	Journal Club/internal medicine	3

D.3. Equine Clinic - Division for Reproduction Medicine:
Student group-based schedule (in detail) for final clinical rotation

Day	Time	Activity	Group size per Teacher
Monday	09:00 to 15:00	introduction, gynacological examination incl. transrectal palpation and utrasound	2 to 5
Tuesday	09:00 to 15:00	andrological examination, semen collection	2 to 5
Wednesday	09:00 to 15:00	introduction, gynacological examination incl. transrectal palpation and utrasound	2 to 5
Thursday	09:00 to 15:00	semen collection and semen evaluation	2 to 5
Friday	09:00 to 15:00	swab collection (mares and stallions) , uterine cytology, uterine biopsy	2 to 5

E.1. Small Animal Clinic: Overview of the final clinical rotation

Group A1									
No.	**Week 01a***	**Week 01b***	**Week 02**	**Week 03**	**Week 04**	**Week 05**	**Week 06**	**Week 07**	**Week 08**
1		reprod. med.	small mammals, exotics, birds	ophthalmology	surgery	surgery	emergency	internal med.	internal med.
2		reprod. med.	small mammals, exotics, birds	ophthalmology	surgery	surgery	emergency	internal med.	internal med.
3		reprod. med.	ophthalmology	small mammals, exotics, birds	surgery	surgery	emergency	internal med.	internal med.
4		reprod. med.	ophthalmology	small mammals, exotics, birds	surgery	surgery	emergency	internal med.	internal med.
5		small mammals, exotics, birds	surgery	surgery	internal med.	internal med.	reprod. med.	emergency	ophthalmology
6		small mammals, exotics, birds	surgery	surgery	internal med.	internal med.	reprod. med.	emergency	ophthalmology

7	small mammals, exotics, birds	surgery	surgery	internal med.	internal med.	reprod. med.	ophthalmology	emergency
8	small mammals, exotics, birds	surgery	surgery	internal med.	internal med.	reprod. med.	ophthalmology	emergency
9	reprod. med.	internal med.	internal med.	small mammals, exotics, birds	emergency	ophthalmology	surgery	surgery
10	reprod. med.	internal med.	internal med.	small mammals, exotics, birds	emergency	ophthalmology	surgery	surgery
11	reprod. med.	internal med.	internal med.	ophthalmology	emergency	small mammals, exotics, birds	surgery	surgery
12	reprod. med.	internal med.	internal med.	ophthalmology	emergency	small mammals, exotics, birds	surgery	surgery

*To enforce hands-on teaching in small animal reproduction medicine in small groups, sub-groups of 6 students each start with a time shift into the final clinical rotation.

E.2. Small Animal Clinic:
Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
1	08.00 - 16.23	Introduction in to the upcoming seven weeks of clinical rotation, safety advices, hygiene instruction, animal handling, clinic tour, wet lab in hygiene, blood sampling and placement of i.v. catheter placement, introduction to clinic IT programme (Vetera)	1-12
2	08.00 - 16.23	small mammals, exotics, birds: morning rounds, in-patients (hands-on), ambulatory clinic (observation), in-patients (hands-on), afternoon rounds	1-2
3	08.00 - 16.23	small mammals, exotics, birds: morning rounds, in-patients (hands-on), ambulatory clinic (observation), elective surgeries (observation), in-patients (hands-on), afternoon rounds	1-2
4	08.00 - 16.23	small mammals, exotics, birds: morning rounds, in-patients (hands-on), ambulatory clinic (observation), in-patients (hands-on), afternoon rounds	1-2
5	08.00 - 16.23	small mammals, exotics, birds: morning rounds, in-patients (hands-on), ambulatory clinic (observation), in-patients (hands-on), afternoon rounds	1-2
6	08.00 - 16.23	ophthalmology: morning rounds, out-patients (observation), skillslab ophthalmology self-learning, afternoon rounds	1-2
7	08.00 - 16.23	ophthalmology: morning rounds, elective surgeries (observation, hand-on), afternoon rounds	1-2
8	08.00 - 16.23	ophthalmology: morning rounds, out-patients (hands-on), report writting, afternoon rounds	1-2
9	08.00 - 16.23	ophthalmology: morning rounds, self studies, report writing, out-patients (hands-on), afternoon rounds, feed-back round	1-2
10	08.00 - 16.23	internal medicine: morning rounds, in-patients (hands-on), emergency service (observation, hands-on), case discussion, stationary patientes (hands-on), afternoon rounds	4-6
11	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
12	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), wetlab surgery I, afternoon rounds	1-4

13	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
14	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
15	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
16	08.00 - 16.23	surgery unit: morning rounds, stationary patients (hands-on), surgeries (observation, hands-on), stationary patients (hands-on), afternoon rounds	1-4
17	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), wetlab surgery II, afternoon rounds	1-4
18	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
19	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
20	08.00 - 16.23	surgery unit: morning rounds, in-patients (hands-on), allocation depending on case log to either appointments (observation, hands-on), anaesthesiology or surgery (observation, hands-on), afternoon rounds	1-4
21	08.00 - 16.23	emergency service: morning rounds, emercency services (observation, hands-on), case discussion, afternoon rounds	1-4
22	08.00 - 16.23	emergency clinic: morning rounds, emercency services (observation, hands-on), case discussion, afternoon rounds	1-4
23	08.00 - 16.23	emergency clinic: morning rounds, emercency services (observation, hands-on), case discussion, afternoon rounds	1-4

24	15.30 - 23.53	emergency clinic: afternoon rounds, emercency services (observation, hands-on), case discussion	1-4
25	15.30 - 23.53	emergency clinic: afternoon rounds, emercency services (observation, hands-on), case discussion	1-4
26	08.00 - 16.23	internal medicine: morning round, stationary patients (hands-on), appointments (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
27	08.00 - 16.23	internal medicine: morning round, stationary patients (hands-on), appointments (observation, hands-on), students rounds, stationary patients (hands-on), afternoon rounds	1-4
28	08.00 - 16.23	internal medicine: morning rounds, stationary patients (hands-on), appointments (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
29	08.00 - 16.23	internal medicine: morning rounds, stationary patients (hands-on), cardiology appointments (observation, hands-on), students rounds, stationary patients (hands-on), afternoon rounds	1-4
30	08.00 - 16.23	internal medicine: morning rounds, stationary patients (hands-on), appointments (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
31	08.00 - 16.23	internal medicine: morning round, stationary patients (hands-on), appointments (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
32	08.00 - 16.23	internal medicine: morning round, stationary patients (hands-on), appointments (observation, hands-on), students rounds, stationary patients (hands-on), afternoon rounds	1-4
33	08.00 - 16.23	internal medicine: morning rounds, stationary patients (hands-on), dermatology appointments (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
34	08.00 - 16.23	internal medicine: morning rounds, stationary patients (hands-on), emergency service (observation, hands-on), students rounds, stationary patients (hands-on), afternoon rounds	1-4
35	08.00 - 14.00	internal medicine: morning rounds, stationary patients (hands-on), emercency services (observation, hands-on), case discussion, stationary patients (hands-on), afternoon rounds	1-4
35	14.00 - 15.30	log book, evaluation and feedback round	1-12

E.3. Small Animal Clinic – Division for Reproduction Medicine:
Student group-based schedule (in detail) for the final clinical rotation

Day	Time	Activity	Group size per Teacher
day 1	morning	Introduction presentation of the interactive Veterinary Medical Detective [VMD] project case work: **Cycle of the bitch and the cat**	2 to 5
day 1	afternoon	Review, questions and quizzes on the cycle of the bitch and cat	2 to 5
day 2	all day	Appointment consultations between appointments, case work on **pregnancy and birth of the bitch and cat** time for VMD project	2 to 5
day 3	all day	Appointment consultations between appointments, case work on **obstetric care and neonatology** time for VMD project	2 to 5
day 4	all day	Appointment consultations between appointments, case work on **andrology (incl. endoscopy)** time for VMD project	2 to 5
day 5	morning	case work and VMD project	2 to 5
day 5	noon / afternoon	Final quiz on all topics of small animal reproduction (two hours) discussion of the VMD project evaluation	2 to 5

Meat Inspection Course 2023 (8th Semester): Overview

Date	18.04.2023		25.04.2023	02.05.2023	09.05.2023	16.05.2023	23.05.2023	30.05.2023	06.06.2023	13.06.2023	20.06.2023	27.06.2023	04.07.2023	11.07.2023	18.07.2023
Group/ Week	1		2	3	4	5	6	7	8	9	10	11	12	13	14
Group 1	8.30-9.30 **Introduction / Safety Instructions (obligatory for all groups; see individual time schedules)**	**Pathological findings** 9:45-11:45 (R1)		**PMI poultry** 9:30-11:30 Theory laboratory course				**PMI pigs** 9:30-12:00 Mitte	**Captive bolt stunning** 9:30-12:00 Vet Progressum	Animal welfare at transport & slaughter		**PMI bovines** 9:30-12:00 Mitte			
Group 2		**Pathological findings** 12:00-14:00 (R1)		Theory laboratory course **PMI Poultry** 13:00-15:00	**Practical laboratory course** 10:00-12:30 Kursraum RvO	tet.folio Course: preparing Meat inspection practice	Theory PMI Pigs eSFU pigs	**PMI pigs** 13:00-15:30 Mitte	**Captive bolt stunning** 13:30-16:00 Vet Progressum	Animal welfare at transport & slaughter	Theory PMI bovines eSFU bovines	**PMI bovines** 13:00-15:30 Mitte			
Group 3		**Pathological findings** 14:45-16:45 (R1)					**PMI poultry** 9:30-11:30 Mitte		**PMI pigs** 9:30-12:00 Mitte	**Captive bolt stunning** 9:30-12:00 Vet Progressum			**PMI bovines** 9:30-12:00 Mitte	Animal welfare at transport & slaughter	
Group 4		**Pathological findings** 9:45-11:45 (R2)	**AMI bovines and pigs** 10:30-13:00 HS Klauentiere	Theory laboratory course	**Practical laboratory course** 13:30-16:00 Kursraum RvO	tet.folio Course: preparing Meat inspection practice	**PMI poultry** 13:00-15:00 Mitte	Theory PMI Pigs eSFU pigs	**PMI pigs** 13:00-15:30 Mitte	**Captive bolt stunning** 13:30-16:00 Vet Progressum		Theory PMI bovines eSFU bovines	**PMI bovines** 13:00-15:30 Mitte	Animal welfare at transport & slaughter	
Group 5		**Pathological findings** 12.00-14:00 (R2)	**PMI poultry** 9:30-11:30 Mitte				**Practical laboratory course** 10:00-12:30 Kursraum RvO	tet.folio Course: preparing Meat inspection practice		**PMI pigs** 9:30-12:00 Mitte	Animal welfare at transport & slaughter	**Captive bolt stunning** 9:30-12:00 Vet Progressum		**PMI bovines** 9:30-12:00 Mitte	
Group 6		**Pathological findings** 14:30-16:30 (R2)	**PMI poultry** 13:00-15:00 Mitte			Theory laboratory course			Theory PMI Pigs eSFU pigs	**PMI pigs** 13:00-15:30 Mitte	Animal welfare at transport & slaughter	**Captive bolt stunning** 13:30-16:00 Vet Progressum	Theory PMI bovines eSFU bovines	**PMI bovines** 13:00-15:30 Mitte	
Group 7		**Pathological findings** 9:45-11:45 (R3)			**PMI Poultry** 9:30-11:30 Mitte		**Practical laboratory course** 13:30-16:00 Kursraum RvO	tet.folio Course: preparing Meat inspection practice	Theory PMI Pigs	eSFU pigs	**PMI pigs** 9:30-12:00 Mitte	Animal welfare at transport & slaughter	**Captive bolt stunning** 10:15-12:45 Vet Progressum		**PMI bovines** 9:30-12:00 Mitte
Group 8		**Pathological findings** 12:30-14:30 (R3)		**AMI bovines and pigs** 10:30-13:00 HS Klauentiere	**PMI Poultry** 13:00-15:00 Mitte	Theory laboratory course			Theory PMI Pigs	eSFU pigs	**PMI pigs** 13:00-15:30 Mitte	Animal welfare at transport & slaughter	**Captive bolt stunning** 13:30-16:00 Vet Progressum	Theory PMI bovines eSFU bovines	**PMI bovines** 13:00-15:30 Mitte

AMI - ante mortem inspection
PMI - post mortem inspection
blue - selfstudy time

Meat Inspection Course 2023 (8th Semester): Student group-based schedule (in detail)

Day	Time	Activity	Group size per Teacher
1	08:30 – 09:30	Introduction / Safety Instructions for practical courses	20
1	14:45 – 16:45	Pathological findings in post mortem inspection of bovines, pigs, poultry (Group Discussion)	10
2	10:30 – 13:00	Practical course: Ante mortem inspection of bovines and pigs	10
3	10:00 – 13:00	Theory laboratory course (with MC test)	Self study time
4	13:30 – 16:00	Practical course: Laboratory examinations (bateriological examination, residue testing, *Trichinella* diagnostics, coocking test: boar taint detection test)	20
5	10:00 – 13:00	tet.folio course: Preparing for the meat inspection practice at the abattoir	Self study time
6	09:30 – 11:30	Practical course: Post mortem inspection of poultry	
7	9:00 – 10:00	Theory meat inspection of pigs	Self study time
7	10:30 – 12:30	eSFU: Meat inspection pigs (study materials from Project eSFU: eLearning material for ante and post mortem meat inspection of pigs, with MC test)	Self study time
8	09:30 – 12:00	Practical course: Post mortem inspection of pigs and pH measuring (for PSE meat)	10
9	09:30 – 12:00	Practical course: Captive bolt gun stunning (pigs and bovines)	20
10	no courses	Catch-up date	
11	9:00 – 10:00	Theory meat inspection of bovines	Self study time
11	10:30 – 12:30	eSFU: Meat inspection bovines (study material from Project eSFU: eLearning material for ante and post mortem meat inspection of bovines, with MC test)	Self study time
12	09:30 – 12:00	Practical course: Post mortem inspection of bovines	10
13	10:00 – 13:00	Theory animal welfare at transport and slaughter (with MC test)	Self study time
14	no courses	Catch-up date	

Appendix to 3.1.5.b.: Logbook of the final Clinical Rotation (Version "Small Animal Clinic")

Logbook Clinical Rotation (Small Animal Clinic)

First and last name of student

Please enter the **number of your rotation group**.	O 01	O 02	O 03	O 04	O 05	O 06

Year and semester in which the clinical rotation was performed.	O ST 2021	O WT 2021/22	O ST 2022	O WT 2022/23	O ST 2023	O WT 2023/24

ROTATION PERIOD "Small Animal Clinic": CONTENTS AND AIMS (Day One Competences)

1. Communicate with clients	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
2. Record keeping	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
3. Preparation of a case report	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
4. Signalement	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
5. Perform a complete clinical examination	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
6. Perform basic first aid (emergency patient)	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
7. Use X-ray	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
8. Use ultrasound	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
9. Laboratory diagnostics: Collecting samples	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
10. Laboratory diagnostics: Storage and transfer of samples	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
11. Laboratory diagnostics: Performing standard laboratory tests	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
12. Laboratory diagnostics: Performing urin analysis	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
13. Laboratory diagnostics: Interpretation of results	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
14. Application of drugs (p.o. / rectal / s.c. / i.m. / i.v. / i.mam. / indwelling catheter insertion)	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
15. Anaesthesia including ECG	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
16. Management of wounds including bandages	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
17. Dental care	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient

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18. Orthopedics / Traumatology	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
19. Abdominal surgery (excluding urogenital tract)	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
20. Diagnostic and treatment of urogenital tract including obstetrics	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
21. Other soft tissue surgery	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
22. Ophthalmology	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient
23. Euthanasia	☐ Observed / Explained	☐ Performed on a model (Skills Lab)	☐ Performed on a patient

COMMENTS OR RECOMMENDATIONS?

Please note here:

DOCUMENTATION

Date / Signature Student Date / Signature Supervisor

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Appendix to 3.1.7.: Elective courses of the tracking system offered in the last full academic year prior to the visitation

Subject	Title	Course No.	Max. no.
Basic Subjects	Introduction to mathematics/physics for veterinarians	08020-W23	180
	Clinical aspects of zoo and wildlife biology Part 1	08021-W23	160
	Physics exercises with a practical focus	08032-W23	190
	Veterinary optical imaging methods	08126-S23	10
	Chemistry very easy – First step to Biochemistry	08167-W23	200
	Behavioral biological methods	08477-W23	25
	Behavioral biology methods	08583-S23	30
	Emerging Infectious Diseases - EID	08018-S23	25
Basic Science	Wildlife diseases caused by retroviruses and retrotransposons	08018-W23	25
	Emerging Infectious Diseases	08019-W23	25
	Wildlife diseases caused by retroviruses and retrotransposons	08020-S23	25
	PraepCoach: Solution-oriented Anatomical Dissection	08070-W23	45
	Communication in veterinary medicine	08085-S23	40
	Fundamentals of business in veterinary practice management	08087-W23	80
	Institute Seminar ScienceCampus Chronic Inflammation	08103-W23	40
	Physiological Seminar for Graduate Students and Journal Club	08124-S23	10
	Physiological Seminar for Graduate Students and Journal Club I	08124-W23	10
	ScienceCampus Lecture Series on Chronic Inflammation II	08127-S23	40
	Physiology for veterinarians - selected topics in English	08131-W23	30
	Business administration for veterinarians; Part 2	08133-S23	80
	Pathophysiology of Selected Organ Systems I	08133-W23	160
	Practice of beekeeping	08160-S23	18
	Epigenetics: Reproduction, diseases and life circumstances	08162-S23	24
	Animal biochemistry seminar	08166-S23	10
	Fundamentals and application of biochemical methods in life sciences	08168-W23	20
	Doping, Drugs & Anabolic Steroids - Mode of action of (il)legal performance enhancement	08169-S23	20
	Doping, Drugs & Anabolic Steroids - Mode of action of (il)legal performance enhancement	08169-W23	20
	Animal Biochemistry Seminar	08170-W23	10
	Small pet nutrition	08206-S23	60
	From the lab to a publication - gut microbiota in animal nutrition	08209-S23	6

	Molecular virology	08290-S23	30
	Molecular virology	08290-W23	35
	1x1 of genetic engeneering and safety	08293-S23	10
	1x1 of genetic engeneering and safety	08293-W23	12
	Population-based diagnosis of animal diseases - from sample to result	08294-W23	8
	Resistances in veterinary medicine	08295-W23	30
	Antibodies: tools for diagnostic tests	08316-S23	8
	Cellular immune response: Focus on macrophages	08317-S23	8
	Excersises in flow cytometry: FACS course I	08318-S23	8
	Cloning of and screening for genes	08320-S23	8
	Antiviral vaccines	08321-S23	12
	Antiviral vaccines	08321-W23	12
	T-helper cell subpopulations and their functions	08322-S23	10
	Helminths and allergies	08323-S23	8
	Natural defense mechanisms: from basic research to therapy	08323-W23	16
	Molecular disease mechanisms in immunology - auto-immunity, allergy, immunodeficiency etc	08324-S23	24
	Applied comparative immunology	08325-S23	10
	Journal club on hot topics in infection immunology	08325-W23	8
	Current Research Topics in Infection Immunology	08326-S23	6
	Cellular immune responses: focus on macrophages	08326-W23	8
	Infection biology journal club	08327-S23	10
	Research methods in T-cell immunology	08328-S23	10
	Vaccine development in veterinary medicine	08330-S23	25
	Molecular cloning and amplification of defined genes	08331-W23	8
	Applied FACS technology	08332-W23	8
	Vector-transmitted helminth infection: life cycle and detection	08333-W23	8
	Applied comparative immunology	08335-W23	25
	Current Research Topics	08340-W23	10
	Research methods in T cell immunology	08342-W23	8
	Molecular pathogenesis of bacterial infections	08370-S23	18
	Molecular pathogenesis of bacterial infectious diseases	08370-W23	30
	Interactive animal disease control	08372-W23	30
	Cellular Microbiology of Veterinary Bacterial Pathogens	08375-S23	20
	Cellular Microbiology of Veterinary Bacterial Pathogens	08375-W23	30
	Antimicrobial resistance in veterinary science	08384-S23	20
	From botulism to blackleg - anaerobic spore formers as animal disease and zoonotic agents	08384-W23	30
	Multiresistant and zoonotic infectious agents in a One Health context	08386-W23	30

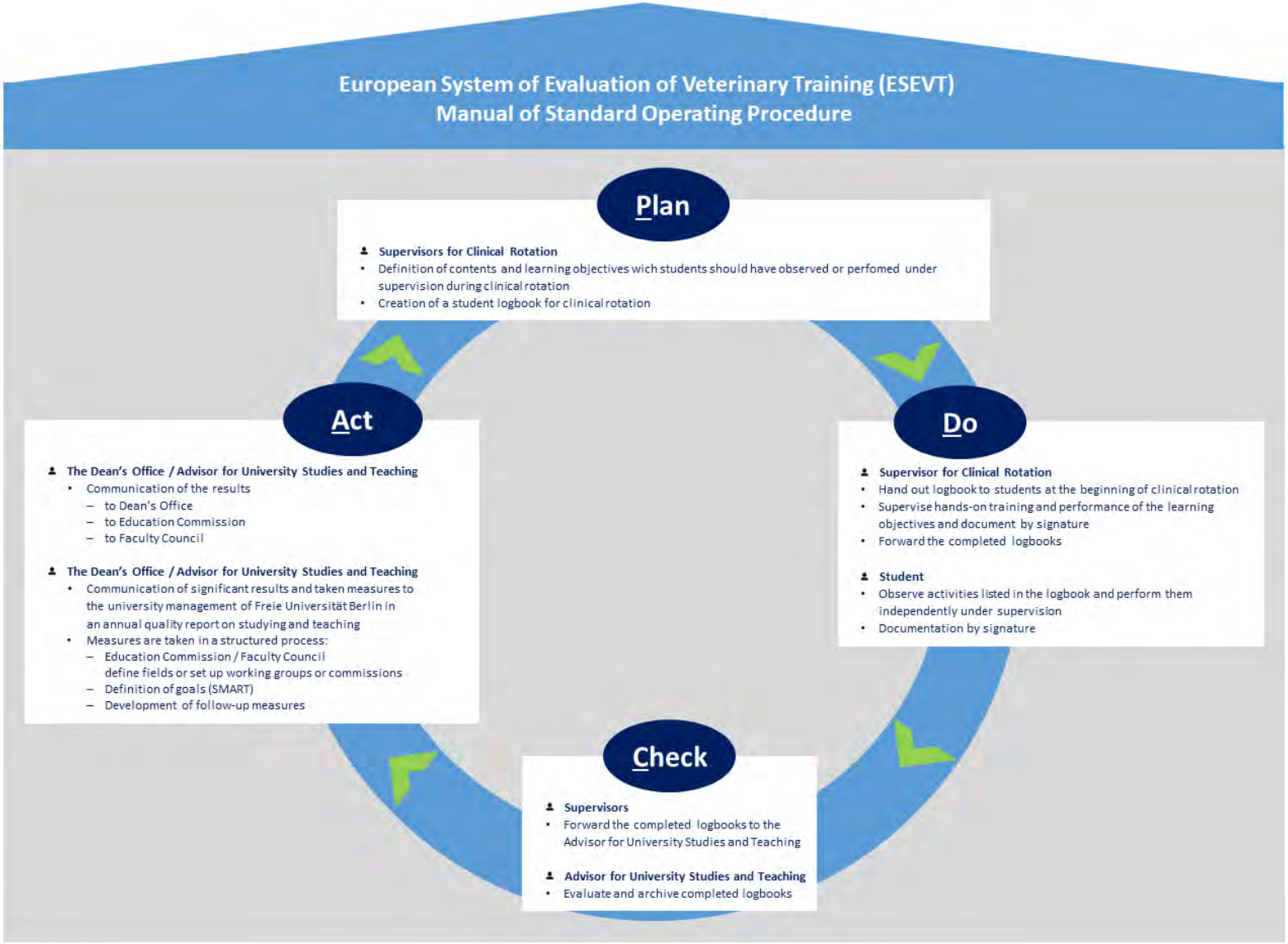
	Ancient weapons: Structure and function of bacterial toxins and their relevance in veterinary medicine	08389-W23	30
	You have to learn the rules of the game: key biomolecular research methods training - theoretical basics	08390-W23	30
	You have to learn the rules of the game: key biomolecular research methods training - practical course	08391-W23	8
	Ancient weapons: structure and function of bacterial toxins and their relevanece in veterinary medicine	08395-S23	20
	DAMR – Dissemination of Antimicrobial Resistance knowledge (UNA Europa)	08396-W23	120
	Bacterial biofilm formation and interactions	08465-W23	12
	Introduction to laboratory work for veterinarians I	08473-W23	25
	Introduction to laboratory work for veterinarians II	08476-W23	25
	3R Online Seminar: "Alternatives to animal use in research and education - Refine, Reduce & Replace"	08478-W23	120
	Basics of experimental neurological research	08479-W23	20
	Scientific methods for recording and monitoring animal welfare	08480-W23	20
	Scientific methods for recording and evaluating animal welfare	08584-S23	20
	Fundamentals of experimental neurological research	08585-S23	20
	Emerging and re-emerging diseases: News from scientific research	08628-S23	10
	Research news on 'Emerging and re-emerging diseases'	08628-W23	20
	Parasites of non-traditional companion animals	08671-W23	30
	Vector-transmitted pathogens	08674-S23	25
	Basics in pharmacology	08739-W23	25
	Research at the School of Veterinary Medicine	08781-S23	60
	Risk analysis in veterinary science	08781-W23	20
	Digital Veterinary Medicine	08782-S23	30
	Qualification for Mentoring - 1	08783-S23	5
	Qualification for Mentoring - 2	08784-S23	5
	Research at the School of Veterinary Medicine	08784-W23	100
	How to plan and write a scientific publication / thesis	08785-W23	60
	How to do Magic with MS Excel	08786-W23	19
	Introduction to animal health economics	08787-W23	20
	Attendance of scientific conferences in Winter 2023/24	08790-W23	300
	Digital Veterinary Medicine I	08791-W23	19
	Digital Veterinary Medicine II	08792-W23	19
	Qualification for Mentoring - 1	08798-W23	20
	Qualification for Mentoring - 2	08799-W23	20
Clinical Sciences	Understanding, surviving and passing the oral exam	08062-S23	20
	Fundamentals of zoo and wildlife science	08013-S23	180

	Clinical aspects of zoo and wildlife biology Part 2	08015-S23	120
	Reproduction medicine in wildlife	08022-W23	120
	Reproduction medicine in wildlife	08023-S23	20
	Anatomy, histology and embryology in clinic and research	08071-S23	80
	Details on selected (exotic) species	08084-S23	40
	Pathophysiology of Selected Organ Systems II	08122-S23	140
	Clinical nutrition for small animals	08233-W23	50
	Clinical case studies in virology	08296-W23	12
	Antibodies: Tools for diagnosis	08328-W23	8
	Vector-borne worm infection: cycle and detection	08329-S23	8
	Metabolic activity of roundworms	08331-S23	8
	Vaccination strategies and specific immune defense exemplified by the pig	08334-W23	
	The pig and the human - antibiotics problem, zoonoses and implications for co-infections, model for human infectious diseases.	08341-W23	15
	Basics of vaccination strategies in companion and farm animals	08373-S23	30
	Practice of laboratory animal science	08582-S23	30
	Modern aspects of veterinary medicine in Zoological Gardens	08620-W23	125
	Clinical-pathological case presentations I	08622-S23	120
	Clinical pathological case demonstrations II	08623-W23	80
	Forensics in animal pathology	08625-S23	20
	Diagnostic exercises: macroscopical lesions Part II	08627-S23	120
	Diagnostic Training: Macrolesions I	08627-W23	80
	Practical aspects of the most important parasitoses in farm animals	08672-S23	25
	Practical aspects of the most important parasitoses in farm animals	08673-W23	25
	Farm-level control of parasites in sheep	08682-W23	8
	Pharmacotherapy of skin diseases	08702-S23	15
	Selected topics in pharmacotherapy and clinical pharmacology	08739-S23	32
	Diagnostic and therapeutical exercises in surgery and orthopedics	08820-S23	15
	Equine Orthopaedics and Surgery – Clinical Exercise – Diagnostics and Therapeutics	08820-W23	15
	Diagnostic and therapeutical exercises in internal medicine	08821-S23	15
	Diagnostic and therapeutical exercises in internal medicine	08821-W23	15
	Case work in sports medicine of horses - interdisciplinary approach	08822-S23	20
	Diagnostic and therapeutical exercises in equine reproduction	08822-W23	15

	Introduction to dentistry for horses	08823-S23	15
	Equine Orthopaedic and Surgical Diagnostic Imaging	08824-S23	60
	Equine Orthopaedic and Surgical Diagnostic Imaging	08830-W23	140
	Internist Journal Club for Equine Diseases	08831-W23	8
	Selected topics in emergency care and routine diagnostic and therapeutic procedures in farm animals	08885-W23	15
	Practical Herd Health Management	08889-W23	10
	CowsAndMore- ein digitales On-Farm-Tool zur objektiven Erfassung und Auswertung von tierbezogenen Merkmalen	08894-S23	10
	Selected cases from buiatrics	08896-S23	12
	Vets4Vieh- Introduction herd health management	08933-W23	15
	Problem-based case demonstrations in small animals II	08970-S23	100
	Special ophthalmology horse	08973-W23	40
	Journal internal medicine, dermatology and oncology	08975-S23	5
	Pre-treatment consultation in eye surgery for dogs and cats	08976-S23	22
	Webinar "Selected Topics in Small Animal Medicine"	08977-S23	50
	Webinar "Selected Topics in Small Animal Medicine"	08977-W23	50
	Neurological/surgical imaging and case studies of small animals	08978-S23	100
	Interactive case presentations I	08980-W23	100
	Emergency and Critical Care	08981-W23	100
	Journal Club (Internal Medicine, Dermatology, Oncology)	08982-W23	5
	Surgical Journal Club	08983-S23	25
	Surgical Journal Club	08983-W23	150
	Resuscitation and first aid for small animals I	08984-S23	16
	Neurosurgery small animals	08984-W23	140
	Resuscitation and first aid for small animals II	08985-S23	16
	Imaging in soft tissue surgery and case studies in small animals	08988-S23	100
	Clinical Demonstrations - Ophthalmology	08992-W23	10
	Applied propaedeutics of small animals and pets (VetCam)	08993-W23	60
	Evolutionary Medicine I	23423c-W23	2
	Evolutionary Medicine II	23423d-W23	2
Animal production	Biology of bees, beekeeping and bee products	08168-S23	25
	Biology of bees, beekeeping and bee products	08170-S23	15
	Biology of bees, beekeeping and bee products	08171-W23	15
	Molecular biology of reproduction	08172-W23	16
	Nutrition and animal health of cattle	08207-S23	170
	Quality assurance of hay, haylage and grass silage for cattle and horses	08208-S23	12
	Dietetic aspects in swine nutrition	08230-W23	30
	Relationship between microbiota, host and feed	08231-W23	35

	Vets4research: To feed or not to feed	08234-W23	8
	Letting the pig out of the barn?! Can we afford (un)sustainable animal farming?	08472-W23	14
	Ectoparasites as disease vectors in the tropics and subtropics	08683-S23	12
	Ectoparasites as vectors of disease in the (sub)tropics	08683-W23	15
	Animal Welfare Indicators on Dairy Farms – practical application of the software package “Cows and More” on dairy farms	08886-W23	15
Food safety and quality	Risk assessment on gene technology used in food and feed production	08165-S23	10
	Milk, Mastitis and Metastasis	08173-W23	15
	Relationship between microbiota, host and feed	08232-W23	25
	Feed and food safety	08235-W23	30
	Animal epidemic diagnostics - from the sample to the findings	08292-S23	6
	Visit the "Milchwirtschaftlichen Lehr- und Untersuchungsanstalt Oranienburg e.V."	08403-W23	30
	Practical training and excursion with focus on animal hygiene	08471-W23	16
	Assessing animal welfare in livestock production - Part 1 Basics	08474-W23	150
	Beseitigung und Verwertung von Tierkörpern und weiteren tierischen Nebenprodukten im Land Berlin	08475-W23	10
	One Health – Concepts and examples with special focus on developing countries	08671-S23	25
	Parasitic pathogens in food - epidemiology, diagnostics and surveillance	08681-W23	30

Appendix to 3.1.8.: PDCA cycle “Student logbook for Clinical Rotation”



Appendix to 3.2.1.2.: E-learning/blended learning modules at the School of Veterinary Medicine

Individual resources are password protected.

Name	**Virtual Microscope for Histological Preparations**
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st - 4th subject-specific semesters
Short description:	Virtual Microscope using "Zoomify" technology. The collection of over 100 histological preparations is used by students for deeper study as well as for preparing for examinations.
Learning environment:	Blackboard Course ID: VETMED_Pool_HistPraep

Name	**Canis Praep**
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st – 2nd subject-specific semesters
Short description:	Comprehensive films for canine preparations; the collection of over 100 hands-on videos on canine preparation is used by students for deeper study as well as for preparing for examinations.
Learning environment:	Blackboard Course ID: VETMED_Anatom_CanisP

Name	**3D virtual anatomy**
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st, 3rd, 4th subject-specific semesters
Short description:	3D images of anatomical specimens.
Learning environment:	Blackboard Course ID: VETMED_Ue_08053

Name	**PlastinaTrainer**
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st - 4th subject-specific semesters
Short description:	Annotated plastinates of anatomical specimens.
Learning environment:	tet.folio

Name	**E-Lectures and E-Courses**
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st, 3rd, 4th subject-specific semesters
Short description:	In anatomy, lectures, practical introductions, and exercises were digitised and made available to students on Blackboard.
Learning environment:	Blackboard Course ID: VETMED_Ue_08052 Course ID: VETMED_Ue_08053

Name	Medical Terminology
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st subject-specific semester
Short description:	Animated videos, various exercises, a digital flashcard system and a glossary for learning medical terminology
Learning environment:	Blackboard Course ID: VETMED_S_08069

Name	Learning Strategies and Time Management
Scientific institution	Institute of Veterinary Anatomy (WE01)
Target groups:	Students in the 1st subject-specific semester
Short description:	Videos, Animated videos, various exercises, self-reflection exercises for learning strategies and time management specifically tailored to the needs of veterinary students
Learning environment:	Blackboard Course ID: VETMED_S_08770

Name	Communication
Scientific institution	Institute of Veterinary Anatomy (WE01), Centre for Veterinary Clinical Services, Farm Animal Clinic, Unit for Reproduction Medicine and Udder Health
Target groups:	Students in the 2nd subject-specific semester
Short description:	Videos, animated videos, various exercises, self-reflection exercises for the basics on communication (communication models and conversation methods)
Learning environment:	Blackboard Course ID: VETMED_S_08812

Name	Interactive Physiological Exercises
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 4th subject-specific semesters and those preparing for preliminary examinations
Short description:	Course materials have been worked up into an interactive and integrated problem-based online script which highlights various topics with self-initiated tests and learning units*). This was achieved using the HTML5 author system "tet.folio", technically conceived at FU Berlin by physics teachers and developed for users in cooperation with the Institute of Veterinary Physiology. The E-script is divided into 10 exercises and didactically integrated into a blended learning scenario that can be exported as a PDF for study purposes.
Learning environment or link:	Blackboard Course ID: VETMEDUe_08103_23S *) e.g.: https://tetfolio.fu-berlin.de/web/we02_blutgruppen

Name	Sim Nerv (Virtual Physiology)
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 4th subject-specific semesters
Short description:	The programme introduces a fully equipped laboratory on the computer screen. Through this, students can realistically conduct classic experiments on an isolated frog's nerve.
Learning environment or link:	Windows-based PC in the PC Pool at the VEE, at home PC (with limited-term license) http://www.virtual-physiology.com/#SimNerv

Name	SimHeart (Virtual Physiology)
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 4th subject-specific semesters
Short description:	Provides a virtual laboratory for assessing cardiac contractions in the Langendorff set-up. It is possible to administer various transmitters and medications and to assess responses to them.
Learning environment or link:	Windows-based PC in the PC Pool at the VEE and on home PCs (with limited-term license) http://www.virtual-physiology.com/#SimHeart

Name	SimMuscle (Virtual Physiology)
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 4th subject-specific semesters as part of physiological exercises and those preparing for preliminary examinations
Short description:	The programme introduces a fully equipped laboratory on the computer screen. Through this, students can realistically conduct classic experiments on an isolated frog's nerve-muscle preparation.
Learning environment or link:	Windows-based PC in the PC Pool at the VEE and on home PCs (with limited-term license) http://www.virtual-physiology.com/#SimMuscle

Name	SimVessel (Virtual Physiology)
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 4th subject-specific semesters as part of physiological exercises and those preparing for preliminary examinations
Short description:	The programme provides a virtual laboratory for examining contractions of smooth muscle cells (from aorta and stomach antrum) and their physiological and pharmacological regulation.
Learning environment or link:	Windows-based PC in the PC Pool at the VEE and on home PCs (with limited-term license) http://www.virtual-physiology.com/#SimVessel

Name	Business Management for Students of Veterinary Medicine
Scientific institution	Institute of Veterinary Physiology (WE02)
Target groups:	Students in the 5th - 8th subject-specific semesters
Short description:	Comprehensive course on business management principles for veterinarians. This interactive tool is found online interactive in various social media.
Link:	Facebook, no website or LMS

Name	Virtual Beekeeping 1.0
Scientific institution	Institute of Biochemistry (WE03)
Target groups:	Students in the 3rd - 11th subject-specific semesters
Short description:	E-learning course "Theory and Practice in Bee-Keeping for Veterinarians"
Link:	https://ssl2.cms.fu-berlin.de/vetmed/e-learning/PM/bienenhaltung/index.html?mktk=lyt5Ba2vQte8GJO%2BhnjeeLBIGSGNn5IFRZ3%2B8d%2FD7lnRdlPuCKDWhHTjbv9KveS%2B

Name	eMibi
Scientific institution	Institute of Microbiology and Epizootics (WE07)
Target groups:	Students in the 5th - 11th subject-specific semesters
Short description:	Computer-based, self-directed learning for preparation and post-processing of internship and for examination preparation
Link:	https://ssl2.cms.fu-berlin.de/vetmed/e-learning/PM/emibi

Name	Meat Inspection Course
Scientific institution	Institute of Food Safety and Food Hygiene (WE 08)
Target groups:	Students in the 8th – 11th subject-specific semesters
Short description:	The E-Learning tool “meat inspection of cattle and pigs” offers the opportunity to learn about the legal requirements of meat inspection. In addition, information and tips are given on why certain organs are examined and how, for example, the most important lymph nodes are examined.
Link:	The link is provided via Blackboard and only available for students of FU Berlin: https://www.vetmed.fu-berlin.de/e-learning/rind_schwein/

Name	eSchulTS²
Scientific institution	Institute of Food Safety and Food Hygiene (WE 08); Institute of Anmial Welfare, Animal Behavior and Laboratory Animal Science (WE 11); Institute of Veterinary Epidemiology and Biostatistics (WE 16)
Target groups:	Students in the 6th – 11th subject-specific semesters
Short description:	The E-Learning tool offers recommendations for action and knowledge on the correct handling of pigs and cattle during transport and slaughter based on EU and national animal wefare law in 6 different languages. Topics are presented with videos, animation, and photos.

Link:	https://tetfolio.fu-berlin.de/web/eschults2

Name	**Multimedia/multisource support of self-study in galenics and prescribing medications**
Scientific institution	Institute of Pharmacology and Toxicology (WE14)
Target groups:	Students in the 7th subject-specific semester
Short description:	In Germany veterinarians have the right to dispense drugs through their pharmacy (§44 TAMG, national law). This also includes preparing drugs where there is no authorised veterinary medicinal product (VMP) available (according to Article 112-114 EU VO 2019/6). Thus, the 7th semester students attend a mandatory practical course in galenics and prescribing, in which they learn to prepare simple veterinary formulations ranging from powders, dilutions, solutions to ointments. In order to enhance self-study, we offer several videos in which the various recipes and necessary equipment are explained and demonstrated. Furthermore, we use a cloud-based document to practice how to prescribe VMPs according to EU and national regulations and narcotics according to national law for different indications. Students are allocated to groups and work on a specific case, e.g. lameness in a horse, in a virtual room. At the end results are shared with all students. Students comment anonymously in the document. The course administrator corrects the prescriptions, and helps to clarify remaining questions via direct comments and a virtual meeting session.
Link:	• Course contents on Blackboard • Videos on Vbrick • Google doc prescriptions • Vetidata as a database/resource for approved VMP in Germany • Union Product database for EU approved VMP

Name	**Poultry Diseases online**
Scientific institution	Institute of Poultry Diseases (WE 15)
Target groups:	Students in the 5th - 11th subject-specific semesters
Short description:	Information about different diseases in commercial poultry as well as in exotic and wild birds
Link:	Blackboard https://ssl2.cms.fu-berlin.de/vetmed/e-learning/PM_gefluegel/index.html https://tetfolio.fu-berlin.de/tet/1594618

Name	**QuerVet**
Scientific institution	Institute of Veterinary Epidemiology and Biostatistics (WE 16)
Target groups:	Students in the 1st - 8th subject-specific semesters
Short description:	Case-based, practice-oriented and interdisciplinary blended learning concept for cross-section teaching in veterinary medicine
Learning Environment:	Blackboard Course ID: quervet

Name	**Guideline for the vaccination of cattle and small ruminants 2nd Edition; Guideline for the vaccination of pigs**
Subject	Internal Medicine of Farm Animals
Target Groups:	Students and veterinarians

Name	**Vetipedia**
Scientific institution	Farm Animal Clinic
Target groups:	Students and veterinarians
Short description:	Vetipedia is an editable article collection covering all topics of veterinary medicine. It is used mainly in teaching (students create their own text and image materials) and is used in various learning scenarios. It also serves as a reference work for students of veterinary medicine, practising veterinarians as well as veterinarians in public service or at universities and promotes interdisciplinary learning and understanding through linking.
Link:	www.vetipedia.org

Name	**Critically Appraised Topics (CATs)**
Scientific institution	Farm Animal Clinic
Target groups:	Students and veterinarians
Short description:	Database for independent and collaborative preparation of Critically Appraised Topics (CATs) or knowledge summaries - by students or veterinarians - within the context of evidence-based veterinary medicine. The database enables guided online preparation of CATs as well as a searchable collection of already created CATs. (Awarded the KELDAT Teaching Award 2013)
Link:	http://wikis.fu-berlin.de/display/cats

Name	**Interactive Learning System: Fundamentals of Natural Healing Methods**
Scientific institution	Farm Animal Clinic
Target groups:	Students and veterinarians
Short description:	In this online course, the fundamentals of complementary and alternative medicine are taught contextually within evidence-based veterinary medicine. The theories and application of therapy methods (especially homoeopathy, acupuncture and herbal medicine) are objectively conveyed and illustrated through case examples, videos and animations. A chapter on the currently unsatisfactory scientific situation rounds out the course.
Link:	https://ssl2.cms.fu-berlin.de/vetmed/e-learning/PM/nhv/111nhvallgemein/index.html

Name	eUTER
Scientific institution	Farm Animal Clinic
Target groups:	Students and veterinarians
Short description:	Overview of udder physiology, environmental influences on the udder health as well as diagnosis and therapy of udder diseases
Link:	https://ssl2.cms.fu-berlin.de/vetmed/e-learning/PM/euter_milch/euter/index.html

Name	Case-orientated Ophthalmology
Scientific institution	Small Animal Clinic
Target groups:	Students in the 5th - 11th subject-specific semesters
Short description:	Opthalmological cases for students doing private study for their clinical section, have been prepared on the Casus platform. This is a case-based multimedia learning and author system.
Link:	http://fu-berlin.casus.net/

Name	Veterinary Medical Detectives
Scientific institution	Small Animal Clinic
Target groups:	Students in the 5th - 11th subject-specific semesters
Short description:	Within the framework of the Veterinary Medical Detectives Project, we are developing a smartphone-based learning app comprised of authentic clinical cases across the fields of gynecology, andrology, as well as internal medicine and surgery of dogs, cats and rabbits. The development is supported by veterinary students as part of their ”Clinical Rotation” with the projects overarching goal being to provide students with a state-of-the-art learning platform that is readily accessible while also being fun to engage with. Varying degrees of difficulty throughout the 30+ clinical cases will make this app highly challenging and replayable.

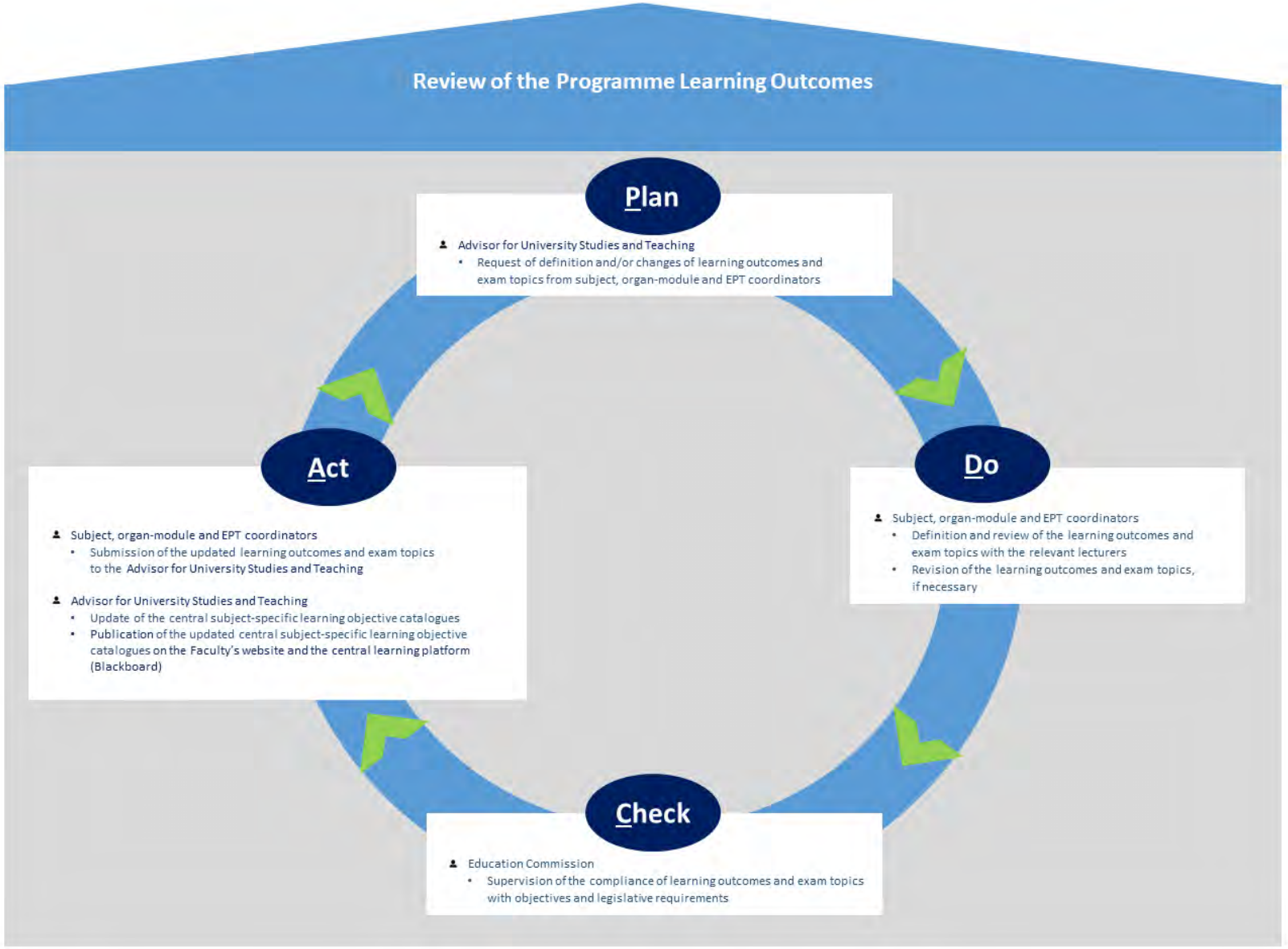
Name	VetCam Berlin
Scientific institution	Veterinary Skills Net and Veterinary Hospital Freie Universität Berlin
Target groups:	Students in the 5th - 11th subject-specific semesters
Short description:	VetCam Berlin provides veterinarians with an opportunity to live stream examinations and interventions on animals from the consulting rooms to the students via the videoconferencing service Webex. Throughout the lecture period, VetCam is used in various classes such as the clinical case work and elective courses. During the lecture-free period, one to two patient examinations per week are streamed from the clinics to the students' homes; Students can use this service on a voluntary basis.
Link:	Blackboard https://fu-berlin.blackboard.com/webapps/blackboard/content/listContentEditable.jsp?content_id=_4993682_1&course_id=_157117_1&mode=reset#contextMenu

Name	**Clinical Course in Surgery**
Scientific institution	Veterinary Skills Net and Veterinary Hospital Freie Universität Berlin
Target groups:	Students in the 5th subject-specific semesters
Short description:	Structured practical training in surgery on seven hands-on clinical stations for practicing and strengthening theoretical knowledge. Theoretical preparation for the hands-on clinical stations in surgery takes place in a flipped classroom approach via tet.folio.
Link:	Blackboard Course ID: VETMED_Ue_088820_23W

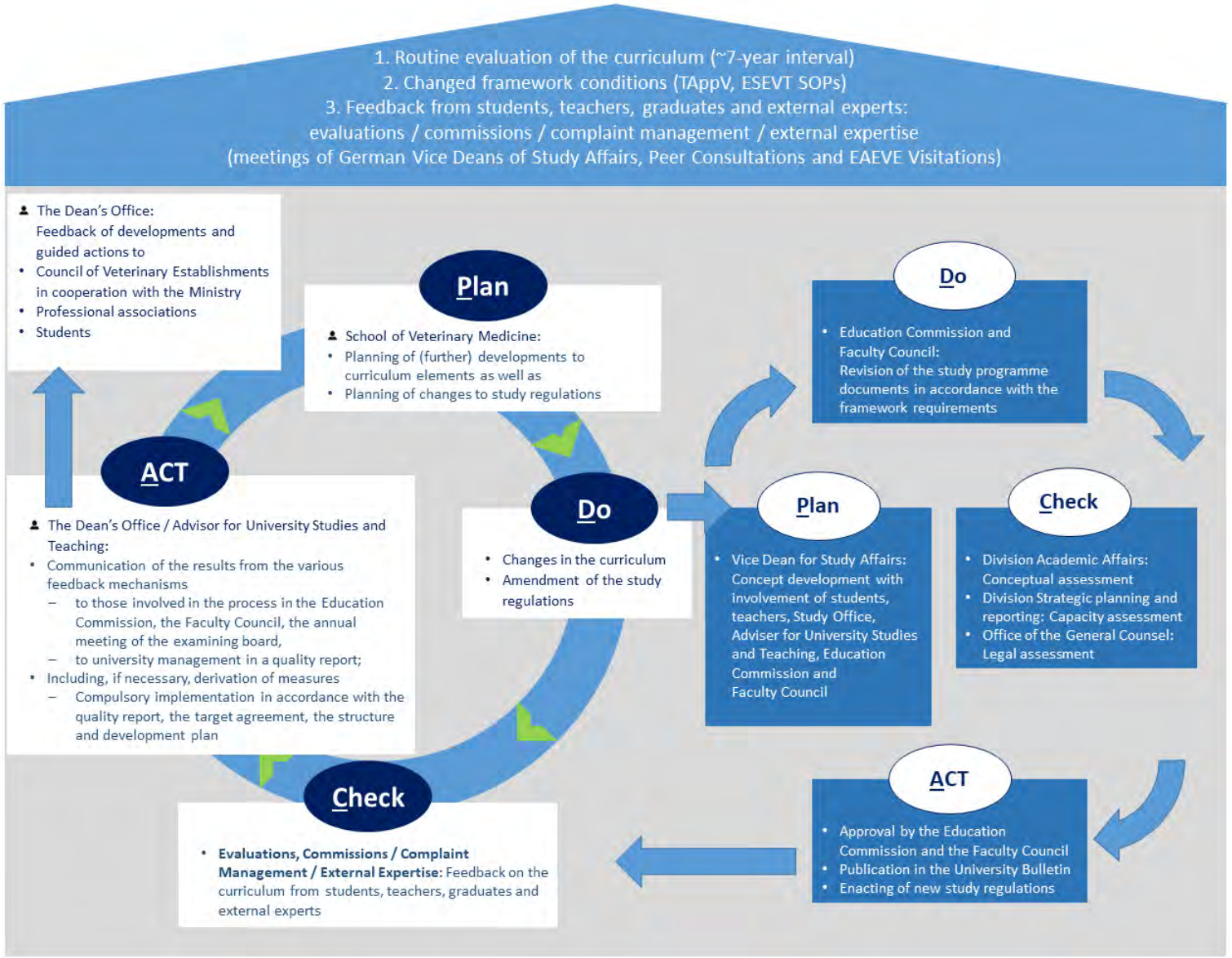
Name	**Clinical Course in Anesthesia**
Scientific institution	Veterinary Skills Net and Veterinary Hospital Freie Universität Berlin
Target groups:	Students in the 7th subject-specific semesters
Short description:	Structured, practical training in anesthesia on 9 hands-on clinical stations for practicing and strengthening theoretical knowledge. Theoretical preparation for the hands-on clinical stations in anesthesia takes place in a flipped classroom approach via tet.folio.
Link:	Blackboard Course ID: VETMED_Ue_088819_22W

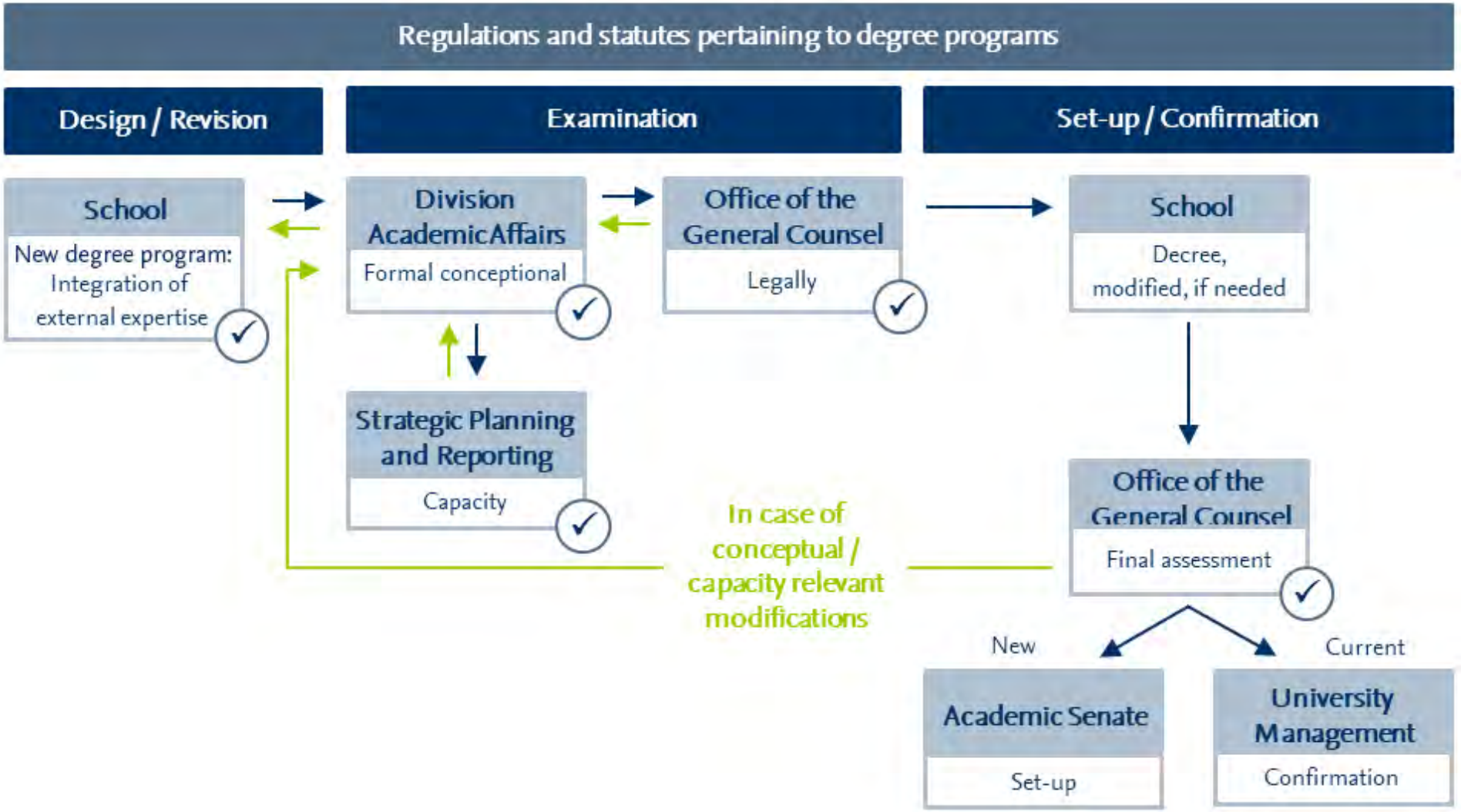
Name	**Theoretical preparation for the Emergency Veterinary Coach-Course (EVC)**
Scientific institution	Veterinary Skills Net and Veterinary Hospital Freie Universität Berlin
Target groups:	Students in the 7th and 8th subject-specific semesters
Short description:	Structured, practical emergency training for students in their 7th and 8th semester. The Emergency Veterinary Coach course consists of three course components that are built on each other: 1. General coaching course “Clinical Coaching” (7th semester) 2. Specialist Coaching at hands-on emergency stations (8th semester) and 3. Applied peer-to-peer coaching at hands-on emergency stations in the actual “Emergency Course” (8th semester) The theoretical preparation for the “Emergency Course” takes place in the flipped classroom approach via tet.folio.
Link:	Blackboard Course ID: VETMED_V_08997_22W Course ID: VETMED_Ue_08997_23W

Appendix to 3.3.3: PDCA cycle “Review of the Programme Learning Outcomes”



Appendix to 3.4.1.: PDCA cycle “Advancement of the curriculum” and schematic workflow of “Quality assurance in the advancement of degree programmes” (simplified process section)




Regulations and statutes pertaining to degree programs
Design / Revision
Examination
Set-up / Confirmation
School
New degree program: Integration of external expertise
Division Academic Affairs
Formal conceptional
Office of the General Counsel
Legally
School
Decree, modified, if needed
Strategic Planning and Reporting
Capacity
In case of conceptual / capacity relevant modifications
Office of the General Counsel
Final assessment
New
Current
Academic Senate
Set-up
University Management
Confirmation

Appendix to 3.5.1.: Online Service Center for Education Establishments under the patronage of the Council of Veterinary Establishments (German PDF printout)

VETERINÄRMEDIZINISCHER FAKULTÄTENTAG

Wir begrüßen Sie recht herzlich im Servicecenter für Ausbildungsstätten

Unser Ziel ist es, Ihnen als praktikumsbetreuende Person eine Plattform zu bieten, mit deren Hilfe Ihnen der Umgang mit Ihren Praktikanten und Praktikantinnen aus dem veterinärmedizinischen Bereich erleichtert wird.

Sofern Sie bereits registriert sind klicken Sie auf 'weiter' weiter

Registrierung

Wir verwenden die Autorenplattform 'tet.folio', zu deren Nutzung ein entsprechender Account Voraussetzung ist.
Sollten Sie noch über keinen tet.folio-Account verfügen, registrieren Sie sich bitte durch Eingabe Ihrer Daten in den nachfolgenden Feldern.

Titel Vorname Nachname

E-Mail Kontakttelefonnummer*)

*) bitte im Format +49 12345 67891011 eingeben

Name der Praktikumsstelle:

Datenschutzklausel

Die auf dieser Website angegebenen personenbezogenen Daten insbesondere Name, Anschrift, Telefonnummern und E-Mailadressen werden allein zur Nutzung der auf dieser Website integrierten Formulare und Unterlagen benötigt. Diese Verwendung benötigt Ihre Einwilligung.

☐ Ich stimme der hier angegebenen Verwendung meiner Daten zu.

Anmeldung Klicken Sie abschließend auf 'Anmeldung' um Ihre Daten zu übermitteln.
Der Administrator dieser Seite wird darüber per E-Mail informiert.

Die Freischaltung Ihres Accounts erfolgt nach Prüfung zeitnah. Sie werden via E-Mail über die weitere Vorgehensweise informiert.

Sollten Sie im Verlauf der Nutzung dieses Portals nach Ihren Accountdaten gefragt werden, verwenden Sie bitte die, die Sie per E-Mail erhalten haben. Ohne diese Authentifizierung ist keine weitere Nutzung möglich.

PDF-Export

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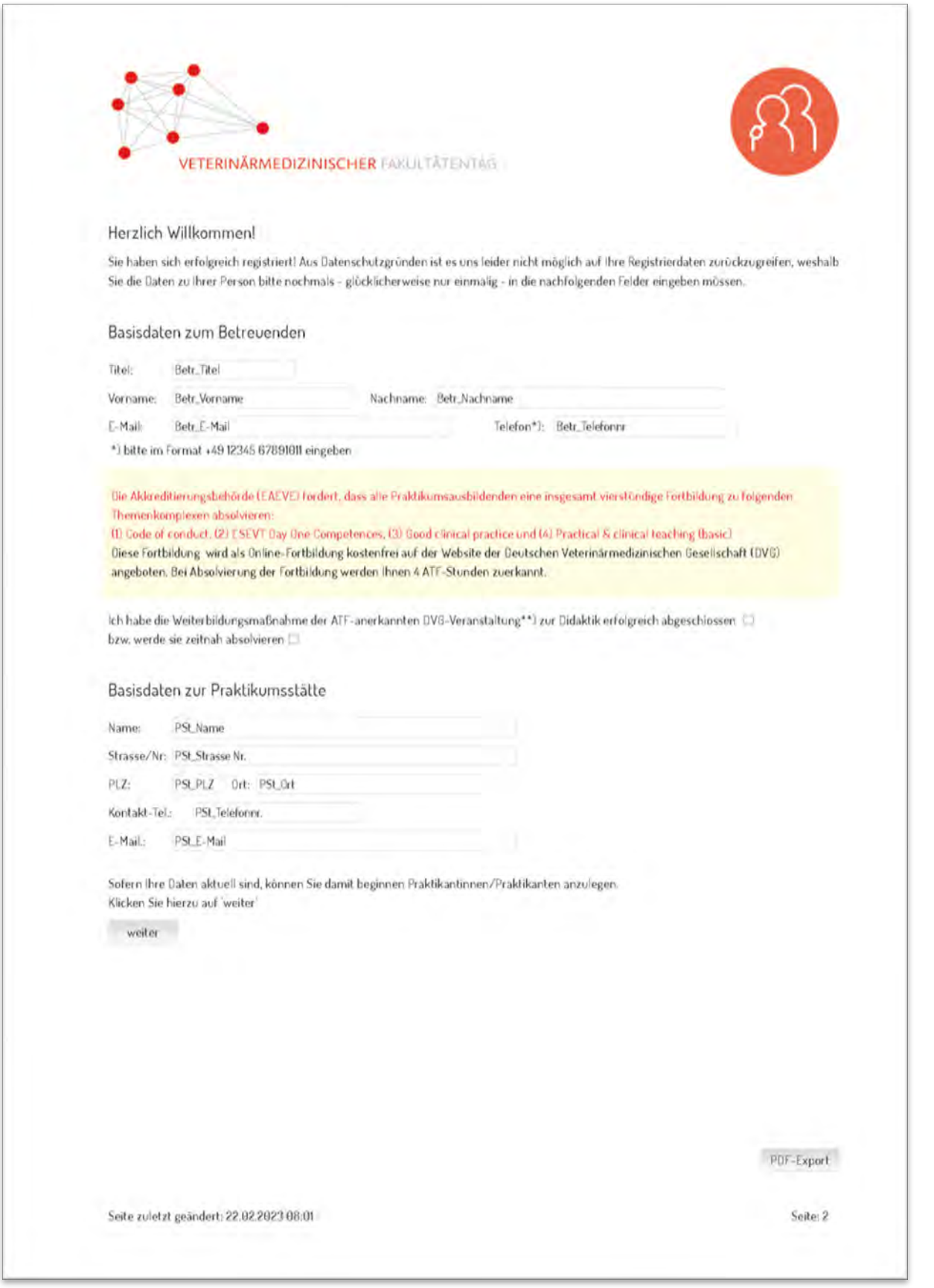

VETERINÄRMEDIZINISCHER FAKULTÄTENTAG

Herzlich Willkommen!

Sie haben sich erfolgreich registriert! Aus Datenschutzgründen ist es uns leider nicht möglich auf Ihre Registrierdaten zurückzugreifen, weshalb Sie die Daten zu Ihrer Person bitte nochmals - glücklicherweise nur einmalig - in die nachfolgenden Felder eingeben müssen.

Basisdaten zum Betreuenden

Titel: Betr_Titel

Vorname: Betr_Vorname Nachname: Betr_Nachname

E-Mail: Betr_E-Mail Telefon*): Betr_Telefonnr

*) bitte im Format +49 12345 67891011 eingeben

Die Akkreditierungsbehörde (EAEVE) fordert, dass alle Praktikumsausbildenden eine insgesamt vierstündige Fortbildung zu folgenden Themenkomplexen absolvieren:
(1) Code of conduct, (2) ESEVT Day One Competences, (3) Good clinical practice und (4) Practical & clinical teaching (basic)
Diese Fortbildung wird als Online-Fortbildung kostenfrei auf der Website der Deutschen Veterinärmedizinischen Gesellschaft (DVG) angeboten. Bei Absolvierung der Fortbildung werden Ihnen 4 ATF-Stunden zuerkannt.

Ich habe die Weiterbildungsmaßnahme der ATF-anerkannten DVG-Veranstaltung**) zur Didaktik erfolgreich abgeschlossen ☐
bzw. werde sie zeitnah absolvieren ☐

Basisdaten zur Praktikumsstätte

Name: PSt_Name

Strasse/Nr: PSt_Strasse Nr.

PLZ: PSt_PLZ Ort: PSt_Ort

Kontakt-Tel.: PSt_Telefonnr.

E-Mail.: PSt_E-Mail

Sofern Ihre Daten aktuell sind, können Sie damit beginnen Praktikantinnen/Praktikanten anzulegen.
Klicken Sie hierzu auf 'weiter'

weiter

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Seite zuletzt geändert: 22.02.2023 08:01 Seite: 2

VETERINÄRMEDIZINISCHER FAKULTÄTENTAG

Bildungsstätte der Praktikantin bzw. des Praktikanten

Wählen Sie bitte aus:

Art des Praktikums

Wählen Sie bitte aus:

Zeitraum des Praktikums

Von: DD.MM.YYYY bis: DD.MM.YYYY

Arbeitstage

Tage

Arbeitsstunden je Tag

Stunden

Betreuerin/Betreuer:

Betr_Titel Betr_Vorname Betr_Nachname

Basisdaten zur Praktikantin / zum Praktikanten

Vorname: Prakt_Vorname Nachname: Prakt_Nachname

Strasse/Nr: Prakt_Strasse PLZ: Prakt_PLZ Ort: Prakt_Ort

E-Mail: Prakt_E-Mail

Telefon*): Prakt_Telefonnummer Geburtstag: DD.MM.YYYY Matrikelnummer: Prakt_Matrikel

* im Format +49 1273 123456

Praktikumsvereinbarung

Abhängig von Ihrer obigen Auswahl werden die korrespondierenden Vorgaben in der Praktikumsvereinbarung angepaßt.

Wir bitten Sie dringend dieses Formular zu benutzen und eigene Formulare möglichst nicht mehr zu verwenden.

Hierdurch kommt gleichzeitig eine Ausbildungsvereinbarung mit der jeweiligen Bildungsstätte zustande.

zur Praktikumsvereinbarung

Praktikumsbescheinigung

Bevor Sie die Praktikumsbescheinigung ausstellen, ist es erforderlich, dass Sie die Praktikantin/den Praktikanten evaluieren.

Das nebenstehende Icon führt Sie zur Evaluationsseite der jeweiligen Bildungseinrichtung der Praktikantin/des Praktikanten.

Nachfolgend erhalten Sie Anweisungen, wie Sie Zugriff auf die Evaluationsseite erhalten.

Hier erscheint ein Textfeld das dynamisch mit Informationen und dem passendem Token (Websitepasswort) gefüllt wird.

zur Evaluationsseite

Nachdem die Sie die Evaluation durchgeführt haben dürfen Sie das nachfolgende Optionskästchen ankücken...

☐ Hiermit bestätige ich, dass ich den Evaluationsbogen für Praktikumsbetreuende ausgefüllt habe

... und die Praktikumsbescheinigung (gemäß Ihrer obigen Vorauswahl) erstellen

Zur Praktikumsbescheinigung

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Seite zuletzt geändert: 22.02.2023 08:07

Seite: 3

Appendix to 3.6.1: Internship (EPT) agreement

Internship Agreement

To conduct a compulsory internship required for students in Veterinary Medicine in accordance with Sections 54 to 62 and Annexes 6 to 12 of TAppV

the Intern

First name/Last name: _____

Date of birth: _____

Street: _____

Town/postcode: _____

Email: _____

Matriculation number*: _____

* An up-to-date certificate of enrolment has been presented as evidence of enrolment in the Veterinary Medicine study course.

assigned by

Veterinary school: _____

Street: _____

Town/postcode: _____

as an associated partner

and

the Internship Provider

Name: _____

Represented by (Title/First name/Last name):

_____

Street: _____

Town/postcode: _____

Telephone: _____

Email: _____

agree the following

Section 1
Type and duration of internship

(1) The Intern shall complete the following internship in accordance with TAppV from _____ to _____,

☐ Section 55 (1) in conjunction with Section 56 (1) and Annex 6
Practical Training in Inspection Activities, Methods, and Technologies for the Food Sector

☐ Section 55 (2) in conjunction with Section 56 (2) and Annex 7
Practical Training in Ante-Mortem and Post-Mortem Meat

☐ Section 57 (1) in conjunction with Section 58 or Section 59 and Annex 8
Practical Training in Curative Veterinary Practice - Part One

☐ Section 57 (2) in conjunction with Section 58 and Annex 9
Practical Training in Curative Veterinary Practice - Part Two

☐ Section 57 (2) in conjunction with Section 59 and Annex 10
Practical Training in a Veterinary Clinic

☐ Section 57 (2) in conjunction with Section 60 and Annex 11
Practical Training in an Elective Internship

☐ Section 61 in conjunction with Section 62 and Annex 12
Veterinary Public Health (Veterinary Inspection Offices)

(2) The standard weekly internship period is
_____ days / week
_____ hours / day.

(3) The training objective and purpose derive from the paragraph of TAppV cited under Section 2 (1) and the learning objectives checklist of the assigning educational institution.

(4) The Internship Provider commissions veterinarian _____ with the training of the Intern.

Section 2
Holiday

The Intern is not entitled to any holiday during the internship.

Section 3
Obligations of the Internship Provider

The Internship Provider is obliged to
- impart practical knowledge and skills to the Intern, taking into account the internship logbook and the 'European System for Evaluation of Veterinary Training (ESEVT) Day One Competence' (https://www.eaeve.org/fileadmin/downloads/eccvt/List_of_subjects_and_Day_One_Competences_appro- ved_on_17_January_2019.pdf)
- appoint a supervisor as a contact person,
- provide the necessary work equipment free of charge,
- grant the free time necessary to attend supplementary external educational measures,
- award the Intern an internship certificate in accordance with Annexes 6 to 12 TAppV after completion of the internship.

Section 4
Obligations of the Intern

The Intern is obliged to
- conduct the internship conscientiously,
- follow the instructions of the contact person at the internship provider,
- adhere to the agreed attendance times,
- comply with accident prevention regulations and other company regulations,
- handle the work equipment and other items accessed during the internship with care.

Section 5
Internship documentation/evaluation

The Internship Provider and the Intern agree to provide the training centre with feedback on practical activities in the form of a standardised evaluation and, if applicable, in the form of a standardised logbook. The evaluation at the respective veterinary training centre is carried out anonymously.

Section 6
Inability to attend

The Intern is obliged to inform the contact person immediately if he/she is unable to participate in the internship and of the expected duration of his/her absence.

Section 7
Completion/Termination

(1) The internship ends after the time agreed in Section 1 has expired, without the need for termination.
(2) A mutually agreed change to the internship period is possible, subject to the regulations of TAppV. Any such change requires the written form.
(3) The right to extraordinary termination for good cause remains unaffected for both contracting parties. Termination must be made in writing.

Section 8
Insurance coverage

Accident insurance coverage is provided by the accident insurance provider responsible for the internship company.

Section 9
Confidentiality

The Intern undertakes to maintain confidentiality about matters for which confidentiality must be maintained by law, even after leaving the company. When the internship ends, all official documents as well as any transcripts or copies made must be handed over to the Internship Provider.

Section 10
Subsidiary agreements

Subsidiary agreements must be made in writing. There are no further obligations for the Internship Provider. The internship does not establish an employment relationship with the Internship Provider. There is also no entitlement for the Internship Provider to accept the Intern as an employee or trainee.

_____

_____

_____

_____

_____

Section 11
Training agreement

The conditions of this contract, excluding any additional agreements made, also apply as a training agreement with the assigning veterinary school.

Place/Date	Place/Date
_____	_____
Internship Provider Representative Signature	Intern Signature

Notes

Regarding Section 1 (1) and (2):
In accordance with TAppV (Section 54, Sentence 1), compulsory internships are held outside of the lecture period and generally during full-time working hours throughout the working week in accordance with the workload to an appropriate extent on all days of the week in the respective facilities. A minimum number of hours and a minimum number of weeks which may be met at different times depending on the agreed number of hours/week are set for the duration of the internship. Interns must meet both requirements.

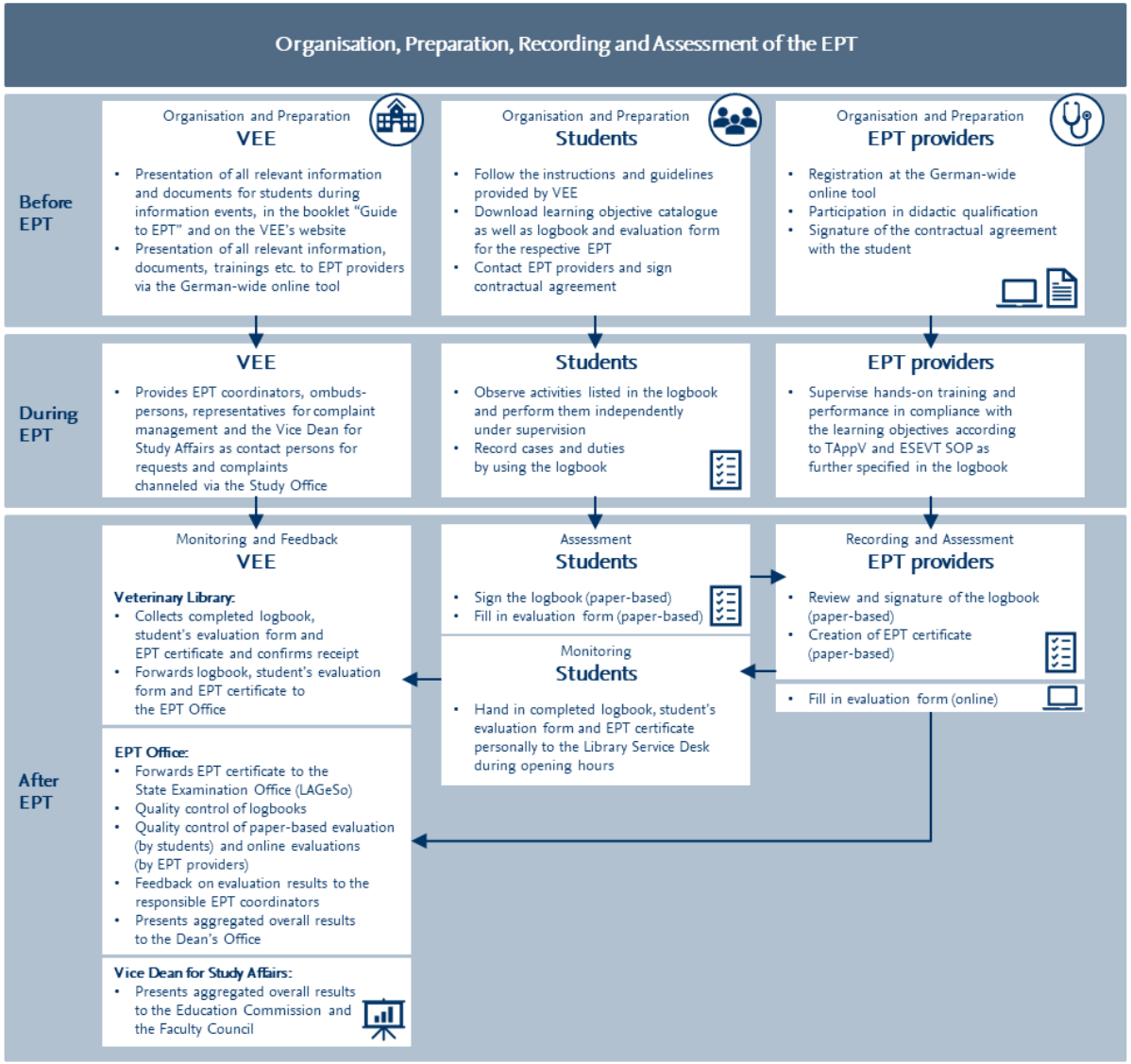
Regarding Section 1 (4)
The regulations of the European accreditation body for veterinary training, the European Association of Establishments for Veterinary Education, EAEVE, require veterinarians supervising internships to provide at least a total of at least four hours of didactic, professional and ethical training. An ATF-accredited training programme developed for this purpose can be found at: https://tetfolio.fu-berlin.de/tet/1867715 *(Note: Registration required)*.

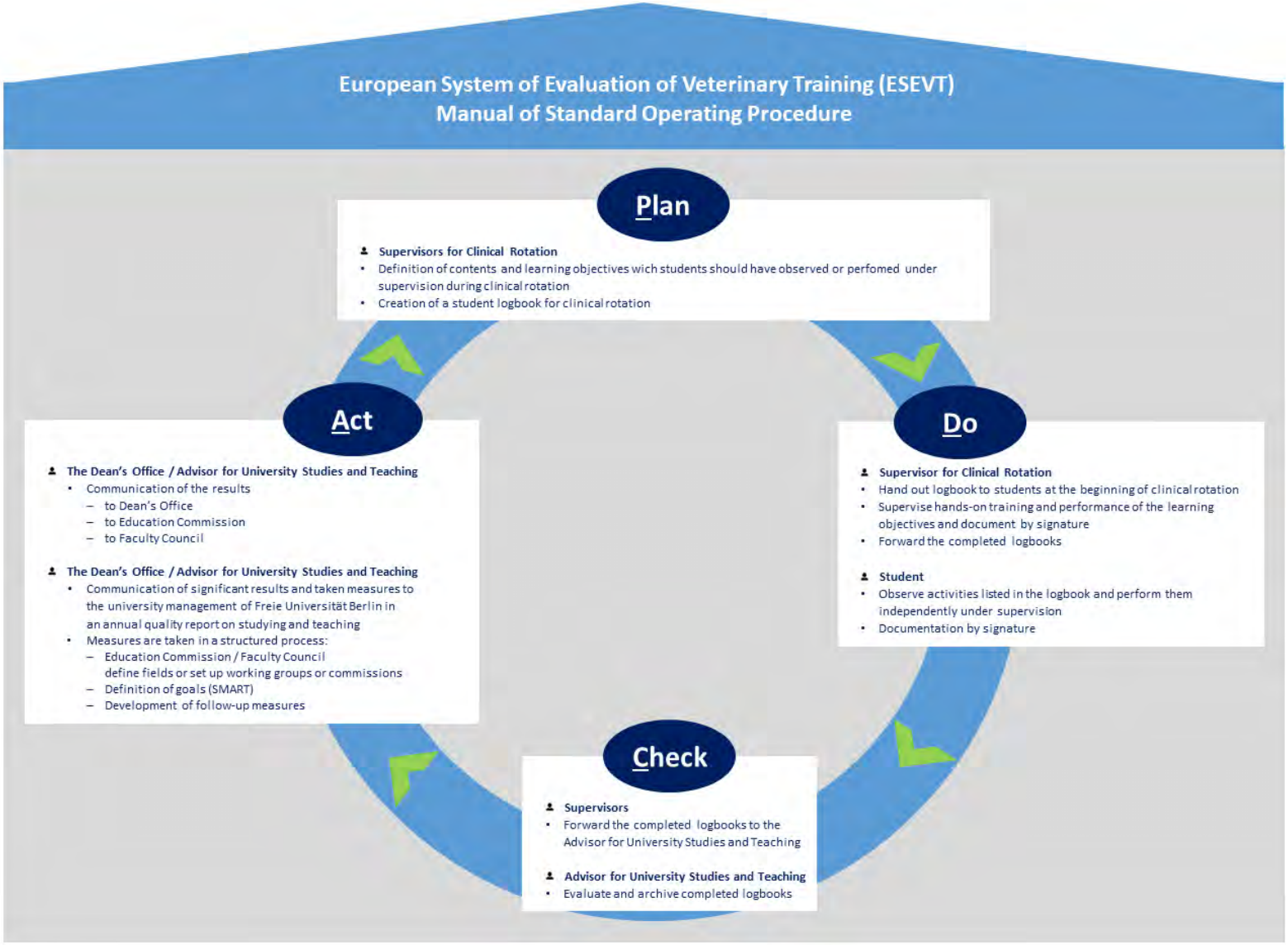
Regarding Section 2:
Interns under the age of 18 are entitled to take holidays during their internship. In this case, Section 19 of the German Youth Labour Protection Act applies. If holiday is agreed under Section 10, contrary to Section 2, this holiday must be deducted from the training period certified in accordance with TAppV.

Regarding Section 5:
In order to ensure a high standard in veterinary training and to improve the achievement of the Day One Competences of graduates, EAEVE calls on the European training centres to establish quality assurance measures –for both intramural teaching at the university and extramural teaching in the form of internships. Veterinary training centres are therefore obliged to have internships evaluated by both students and internship supervisors.

Regarding Section 8:
In the case of university internships, the university has no direct influence on the conduct or organisation of internships. During the internship, students are integrated into the organisational structure of the company, thus fulfilling the requirements for dependent employees according to Section 2 (1) (1) of the Social Code (SGB) VII. For the accident insurance assessment of internships, it is not relevant whether they are voluntary or a compulsory requirement according to the study or examination regulations. The accident insurance provider for the internship company is responsible (Section 133 Para. 1 SGB VII). Any practical activity in connection with studies or a doctorate that is/must be completed outside Germany is not covered by accident insurance, unless the social security law of the host country also provides for an entitlement to benefits for such activities. Corresponding regulations would have to be agreed under Section 10 Subsidiary Agreements

Appendix to 3.7.1.: Schematic workflow of the EPT recording and assessment procedure and PDCA cycle “Monitoring of EPT”




European System of Evaluation of Veterinary Training (ESEVT)
Manual of Standard Operating Procedure
Plan
Supervisors for Clinical Rotation
• Definition of contents and learning objectives wich students should have observed or perfomed under supervision during clinical rotation
• Creation of a student logbook for clinical rotation
Do
Supervisor for Clinical Rotation
• Hand out logbook to students at the beginning of clinical rotation
• Supervise hands-on training and performance of the learning objectives and document by signature
• Forward the completed logbooks
Student
• Observe activities listed in the logbook and perform them independently under supervision
• Documentation by signature
Check
Supervisors
• Forward the completed logbooks to the Advisor for University Studies and Teaching
Advisor for University Studies and Teaching
• Evaluate and archive completed logbooks
Act
The Dean's Office / Advisor for University Studies and Teaching
• Communication of the results
– to Dean's Office
– to Education Commission
– to Faculty Council
The Dean's Office / Advisor for University Studies and Teaching
• Communication of significant results and taken measures to the university management of Freie Universität Berlin in an annual quality report on studying and teaching
• Measures are taken in a structured process:
– Education Commission / Faculty Council define fields or set up working groups or commissions
– Definition of goals (SMART)
– Development of follow-up measures

Appendix to 4.2.1.: Overview of premises for lecturing, group work and practical work

Scientific Unit	Premises for	Campus	Name of Building / Number of Building	Room number	Number of Seats / Places	Size (in sqm)	Equipment
1/14	lecturing	Dahlem	Koserstraße 20, building component C (Lecture hall A)	C025	182	198	media system with PC operated by tablet, beamer, headlights, equiped for hybrid lectures
1	group work	Dahlem	Koserstraße 20, building component C (Microscopy hall)	C024	68	180	68 seats with microscopes, media system: PC with beamer, two screens on front desk plus 6 additional big screens (2 attached to the front wall, 4 to ceiling to improve students' view)
1/14	group work	Dahlem	Koserstraße 20, building component C (Seminar room)	D084	40	120	PC with smartboard, pin walls and flip charts
1	practical work	Dahlem	Koserstraße 20, building component E (Dissection hall)	E020	32 tables with 256 lab stools, 6 tables for demonstration purposes	254	stainless steel tables and lab stools, headsets with microphones, PC, video camera and beamer for demonstrations
1	practical work	Dahlem	Koserstraße 20, building component E (Demonstration hall)	E018	4 tables with 24 laboratory stools	110	
1	skill labs	Dahlem	Koserstraße 20, building component C (Anatomical Collection)	C045	19 tables and up to 79 chairs	205	anatomical specimen, animal skeletons, prepared limbs and bones as visual material for self-study
2	group work	Düppel	House 11	0.08	25	53	Laptop, Beamer

2	practical work	Düppel	House 11	1.46	15	34	diverse equipment for practical classes in physiology (spirometer, kalorimeter, electrocardiograph, etc.)
2	practical work	Düppel	House 11	1.04	88	225	28 PC work stations; diverse equipment for practical classes in physiology and biochemistry (centrifuges, photometer, spirometer, kalorimeter, electrocardiograph, etc.)
3	lecturing	Düppel	House 12	0.12 / 0.13	20		Media technique, Smart board
4	lecturing	Dahlem	House 8		25	48	Projection
4	practical work	Dahlem	House 8		6		Laboratory for courses hands-on learning
4	practical work	Dahlem	House 5		15		Laboratory for courses hands-on learning
4	practical work	Dahlem	House 5		15		Feed mill for practical demonstration
4	practical work	Dahlem	Plant demonstration fields		20		Fields with relevant feed plants
5/6	group work	Düppel	RvO, House 35	R244, Seminar room	12	31.6	Chairs
5/6	practical work	Düppel	RvO, House 35	R236, Course room		83.16	Cytoflex FACS/ Beamer, laboratory equipment, sterile workbenches
5/6	group work	Düppel	RvO, House 35	R162, Seminar room	16	35	Chairs, projector
5/6/7/13	group work	Düppel	RvO, House 35	R164, Seminar room	16	64	Chairs, projector

5/6/7/8/13	lecturing	Düppel	RvO, House 35	R042, Seminar room	30	64	Chairs, projector, Cisco Hybrid System
5/6/7/13	practical work	Düppel	RvO, House 35	R050, large Course room	84		Seating, projector, microscopes, laboratory equipment
8	practical work	Mitte	Meat inspection hall at Campus Mitte, House 13	005		100	chilling and freezing rooms
8	group work	Mitte	Meat inspection hall at Campus Mitte, House 13	015		125	slaughterline, abattoir equipment,
10/13	lecturing	Düppel	TZR, Building 43	1	approx. 35	73	PC, Beamer, Cisco Hybrid System
10/13	lecturing	Düppel	TZR, Building 43	114	approx. 18	50	PC, Smartboard, Cisco Hybrid System
11/16	lecturing/ group work	Düppel	House 21	107	30	50	Moveable furniture, large smartboard, webcam, table microphone, flipchart, WLAN
12	lecturing	Düppel	House 31, 0.08	lecture hall	127	174	beamer, microscopes
12	group work	Düppel	House 31, 1.08	seminar room	20	39	beamer, microscopes
12	practical work	Düppel	House 31, 1.62	microscopy (diagnostic) room	7	35	discussion microscope
12	practical work	Düppel	House 31, 0.07	microscopy (diagnostic) room	7	18	discussion microscope
12	practical work	Düppel	House 31, 1.62	microscopy (diagnostic) room	6	35	microscopes, PC
12	group work	Düppel	House 31, 0.10	student room	15	39	mobile beamer, microscopes, PC

12	practical work	Düppel	House 31, 0.60 - 0.61	necropsy hall	30	115	complete equipment for autopsy of animals up to 1000kg including band saw, various autopsy tables, safety workbench
14	practical work	Dahlem	Koserstr. 20, Building C	Course room, C027	32	100	lab seating with electricity, scales, etc.
16	group work	Düppel	House 22	PC Pool C	19	52	20 inbuild PC for PC-based seminars / workshops; beamer, flipchart, whiteboard
17	lecturing	Düppel	Equine Clinic House 3		185	202	Beamer, Presentation hardware
17	group work	Düppel	Equine Clinic House 3	107	16	46	Beamer, Presentation hardware, equipment for online meetings including camera and microphone
17	group work	Düppel	Equine Clinic House 3	116	16	38	Beamer, Presentation hardware, equipment for online meetings including camera and microphone
17	skill labs	Düppel	Equine Clinic House 3	109	20	56	Horse models for training of nasogastric intubation, jugular vein puncture, transrectal examination of the gynecologic and colic patient, limb bandages; Kits for training of suturing and knot tying, anatomic models of clinically relevant parts of the equine body, material for bandages, surgical gowns and sterile gloves for training of sterile dressing, multiple instrument

							sets for injections, caecocenthesis, abdominocentesis, intraarticular injections, collection of surgical instruments
17	skill labs	Düppel	Equine Clinic House 3	K23	20	96	Tables for fixation of cadaverlimbs, farrier equipment, material for diagnostic analgesia, suture material and instruments, simulation models for sterile preparation of the surgical field and draping, fluorescent liquid and wood´s lamps for simulation of hand desinfection
17	lecturing	Düppel	Equine Clinic House 3	127	30	83	Beamer, presentation hardware
18	lecturing	Düppel	Farm Animal Clinic House 28	13	90	141	Beamer, PC, Crush (Chute), mobile surgery table
18	practical work	Düppel	Farm Animal Clinic House 28	12		66	Crush, Chute, Tables for work on slaughterhouse material (12 students)
18	skill labs	Düppel	Farm Animal Clinic House 34	2		14	dummies for intravenous injection, blood sampling, castration of piglets, euthanasia of pigs, dehorning, sutures, plastinates for application of bandages, bolt shot models
18	practical work	Düppel	Farm Animal Clinic House 34	10		378	stable (loose housing on straw) for cattle owned by the clinic for education on clinical examination (headgates to fix

							10 animals) including hoof trimming chute for functional hoof trimming and orthopaedic treatments
18	group work	Düppel	Farm Animal Clinic House 26	E004	30	82	Tables, chairs, mobile beamer, laptop, monitor, facilities for preparation of beverages
18	group work	Düppel	Farm Animal Clinic House 26	E002	10	20	2 PC's, Smartboard, chairs, Tables
18	group work	Düppel	Farm Animal Clinic House 26	112	17	22	Monitor, PC, library,
18	practical work	Düppel	Farm Animal Clinic House 26	E003a	5	20	blood gas analyzer, analyzers for hematology, blood biochemistry (vetscan), microscope, freezers, fume cupboard, PC, equipment for work safety, cow-side test systems (ß-HB, urinalysis)
18	practical work	Düppel	Farm Animal Clinic House 32	0.30-0.32, 0.34, 0.36-0.37		333	stable for pigs owned by the clinic for education and clinical examination including e.g. claw trimming and basic surgical procedures
18	group work	Düppel	Farm Animal Clinic House 32	0.46	5	18	Chairs, Table, Laptop
19	lecturing	Düppel	House 28	Room 013	100	141	pc, beamer, fixation device for cattle and small ruminants, white board
19	group work	Düppel	House 28	Room 008	9	18	white board, pc
19	practical work	Düppel	House 32	Room 013	5	9	3 microscopes and equipment for spermatology
19	skill labs	Düppel	House 32	Room 003	9	27	pc, different simulators
19	skill labs	Düppel	House 32	room 001	9	123	pc, different simulators

19	practical work	Düppel	House 28	Room 12	15	66	fixation device for cattle and small ruminants, surgical light
19	practical work	Düppel	House 32	Room 001	45	123	fixation device for cattle and small ruminants, phantom for boars, security gates
19	practical work	Düppel	House 27	Room E 005	max. 8	25	Treatment table, Pc, microscope, 2nd monitor, endoscope, two dog models, equpiment for andrological and gynecological examination
19	group work	Düppel	House 32	Room 12	max. 4	5	sperm bank
19	practical work	Düppel	House 27	Room E010	6	29	equipment for semen conversation, centrifuge
19	group work	Düppel	House 27	Room E 006	max. 8	15	quizzes, matching games, interactive games image materials, microscopy, endoscopy on model, pc and 2nd monitor
20/8	lecturing	Düppel	House 1	110		171	lecture hall
20/8	lecturing	Düppel	House 1	107/108		128	laboratories
20	lecturing/ group work	Düppel	House 1	81		48	library
20	practical work	Düppel	House 1	122		81	dog ward
20	practical work	Düppel	House 1	121		21	dog ward, treatment room
20	practical work	Düppel	House 1	120		29	dog ward, intensive care unit
20	practical work	Düppel	House 1				cat ward, vaccinated, treatment room
20	practical work	Düppel	House 1	116		14	cat ward, non-vaccinated, treatment room

20	practical work	Düppel	House 1	115		14	cat ward, intensive care unit
20	practical work	Düppel	House 1	130		28	infection ward
20	practical work	Düppel	House 1	63		17	surgical unit, endoscopy
20	practical work	Düppel	House 1	71		13	surgical unit, recovery ward
20	practical work	Düppel	House 1	72		12	surgical unit, recovery ward
20	practical work	Düppel	House 1	65		20	surgical unit, preparation area
20	practical work	Düppel	House 1	60		24	surgery unit, orthopedic OR
20	practical work	Düppel	House 1	61		41	surgery unit, orthopedic OR
20	practical work	Düppel	House 1	62		33	surgery unit, soft tissue OR
20	practical work	Düppel	House 1	46		20	surgery unit, dentistry
20	practical work	Düppel	House 1	54		12	surgery unit, small mammals and exotics OR
20	practical work	Düppel	House 1	5		68	ambulatory clinic, consultation room
20	practical work	Düppel	House 1	6		38	ambulatory clinic, consultation room
20	practical work	Düppel	House 1	1		17	ambulatory clinic, consultation room
20	practical work	Düppel	House 1	2		19	ambulatory clinic, consultation room
20	practical work	Düppel	House 1	12		10	ambulatory clinic, consultation room

20	practical work	Düppel	House 1	9		8	ambulatory clinic, consultation room
20	practical work	Düppel	House 1	7		23	ambulatory clinic, consultation room, cardiology
20	practical work	Düppel	House 1	8		25	ambulatory clinic, consultation room, ophthalmology
20	practical work	Düppel	House 1	25		35	diagnostic imaging, RX
20	practical work	Düppel	House 1	21		32	diagnostic imaging, RX
20	practical work	Düppel	House 1	46		20	diagnostic imaging, CT
20	practical work	Düppel	House 1	32		53	diagnostic imaging, ultrasonography
20	practical work	Düppel	House 1	26		13	ambulatory clinic, consultation room, neurology
20	skill labs	Düppel	House 2	3.005 4.003-4.007	12	58	Veterinary Skills Lab Apartment

Appendix to 4.2.2.: Number of rooms and places for study and self-learning, lockers, accommodation for on call students, leisure and sanatary facilities

Scientific Unit	Premises for									
	study and self-learning		locker rooms		accommodation for on call students		leisure		sanitary (toilets, washing and/or shower facilities)	
	number of rooms	number of places	number of rooms	number of lockers	number of rooms	number of places	number of rooms	number of places	number of toilets	number of shower facilities
Library (House 6)	4 +	90 + 18 with PC workstations	2	48			1 mother-child room 1Breastfeeding room 2 Lounge areas		6	1
Cafeteria (House 7)			5	160			4 dining and leisure rooms (250 m^2)	100	10	
House 9.2							1 mother-child room 1 Kitchen 1 Meeting-Room 1 Lounge-Room (90 m^2)		1	1
IT Facility (House 31)		37 PC workstations								
Lavatorium (House 33)			4	99					3	8
1/14	4	388	5	446			1	15	22	6
2	1	10	3	84					3	1
3	2	30					1	15	3	

4	1	25	1	5					6	2
5				RvO*						
6	1	20	1	RvO*					2	
7	1	16	2	RvO*						
8	1	3	1	30					4	1
10			2	2			1	6	6	
12	2	16	2	110					6	1
13			1	RvO*					2	
16 /11	1	19							6	1
17	1	10	2	40	2	2			10	4
18	3		4	120	2	3	2	30	8	3
19	2	9	1	9	1	9	1	9	6	
20	2	20	2	90	2	4	2	20	14	2

* RvO= 84 lockers, 10 toilets

Appendix to 4.2.3.: Description of the staff offices and research laboratories

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
1	22	25	21	35	
1			3D laboratory 144	2	3D printer, waterjet with Kärcher-high pressure water cleaning system, vibrating table, fume cupboard for safe removal of supporting material, cabinet for chemicals, fume extractor system with pipe
1			Fixation of specimen and maceration (A081)	3	injectionsystem Funeralia, mobile maceration system Bastra, ceiling crane Demag P7, bandsaw Kolbe 410, cold storage room (+4°C)
1			skeleton construction (D070)	1	precision mechanics
1			Plastination - explosion-proof room (CK83)	1	freezer Biodur HL 05, explosion electric pump Lutz Me II-24
1			Plastination - impregnation (CK84)	1	freezer Biodur HL 05, Bandsaw for the production of disc plastinates Kolbe K430
1			Plastination - gas hardening (EK129)	1	gas curing chest Biodur
1			Fluorescence microscopy 145	2	fluorescence microscope
1			laboratories 141-142	2	microtome: Jung biocut 2035, 2 Heraues incubators, scales, hot plate, magnetic stirrer, fume cupboard Shandon Hyperclean, microscope Olympus CX21, fridge-freezer
1			laboratory CK 096	1	life-cell-imaging system, inverted light microscope, 2 magnetic stirrers with heating
1			laboratory CK 097	1	refridgerated centrifuge, inverted research microscope with fluorescence lamp, CO2 incubator, sterile bench
1			laboratory C098	1	portable autoclave, fridge-freezer, 8 cryotanks für liquid nitrogen, shaking water bath, refridgerated for reaction vessel, cabinet for gas bottles

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
1			laboratory CK099	1	refridgerator, freezer, CO2 incubator, sterile bench, photometer for fluorescence measurement, inverted microscope
1			laboratory 101	1	fridge-freezer, sterile bench, CO2 incubator
1			laboratory 022 - histology/ immunohistochemistry	1	digestor, 2 incubators, refridgerator, cryostat, microscope, scales, micro scales/ precision scales, electrical precision scales, pH-meter, 4 magnetic stirrers
1			laboratory 023 - histology/ immunohistochemistry	1	microwave, 3 water baths, compartment dryer, refridgerator, rotating microscope
1			laboratory C037	2	mini blot mixer, heated magnetic stirrer, sterilizer, fridge-freezer, 19 TFT Acer AL 1917, hp-VET25144, precision scales 82, orbital shaker plattform 409x297mm, system two-dimensional electrophoresis, microwave, Vortex-Genie 2
1			laboratory C039	2	refridgerator, gel-documentation system, XX6, water bath, Rotor Gene RG Real Time, Termomixer + Wechselblock, Mastercycler gradient, Mastercycler, centrifuge, photometer, compartment dryer, incubating Mini-Shaker, microwave, vortex mixer
1			Electron microscopy C057	2	microscope, hot plate, Ultracut
1			Electron microscopy C055	3	microscopes, Diatom, hot plate, Ultracut
1			Electron microscopy C054	2	fume cupboard, incubator, pH-meter, magnetic stirrer with hot plate, microfuge, orbital shaker, test tube shaker, safety cabinet, ultrasonice bath, fridge-freezer, refridgerator, precision scales, binocular microscope, microscope
1			Electron microscopy C042	4	transmission electron microscope, electric field canceller, microscope, Knifemaker, heating cabinet, critical point dryer, gas bottle cabinet, magnetic stirrer with hot plate, polymerization heating cabinet, sample trimmer/specimen trimming device, high purity water system, sputtering system, Ultracut, vacuum drying cabinet

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
2	19	29	24	52	Molecular biology facilities (e.g. real-time cycler ViiA7, BioRad QCycler, elektrophoresis and immunoblotting equipment, Enspire multilabel microplate reader, imaging system ChemiDoc MP), imaging facilities (Leica DMI 6000B with fast filter accessory from Visitron, confocal microscope Zeiss 710, cryotom), cell culture facilities (5 CO2 incubators and 6 steril safety benches), electrophysiology/ion measurement facilities (Ussing chamber, patch clamp and microlelectrode equipment, LS55 Spectrophotometer), radiation safety facilities (β-counter, g-counter, Ussing chamber and microelectrode equipment, RIA/ELISA equipment, HPLC)
3	Office, Hs. 8 Room 0.02	1			PC
3	Office, Hs. 8 Room 0.03	2			PC
3	Office, Hs. 8 Room 0.04	2			PC
3	Office, Hs. 8 Room 0.05	2			PC
3			Store Room for solubles, Hs. 8, Room 0.10	0	Safety cupboard for chemicals
3			Hs. 8, Room 1.20	0	ice-machine, 2x analytical scales
3			Glassware Washroom, Hs. 8, Room 1.21	1	drying cupbaord, dishwasher, water filtration unit
3			Cell Culture Lab, Hs. 8, Room 1.22/ 1.23	2	2x sterile safety cabinets, 2x incubators, microscope with camera, PC, various small electrical equipment and pipettes

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
3			Bacterial Culture Lab, Hs 8, Room 1.24	2	1x sterile safety cabinets, 1x incubator, various small electrical equipment and pipettes
3			Protein lab, Hs. 8, Room 1.25	2	Semidryblotter, gel-electrophoresis, PC for gel documentation and analysis, fume hood, various small electrical equipment and pipettes
3			PCR lab, Hs. 8, Room 1.26	3	2x UV-Boxes, 3x thermal cyclers (1x f. real-time-PCR), gel electrophoresis, PC for gel documentation und -analysis, fume hood, various small electrical equipment and pipettes
3			Microscopy Room, Hs. 8, Room 1.27	1	fluorescence microscope with camera, PC
3			Storage Hs. 8, Room 1.28	0	2x -80°C-freezers
3			Storage, Hs. 8, Room 1.29	0	Storage
3			House 11, Teaching Lab 1.04	max. 8 x 7 students plus 7 supervisors/demonstrators	3 lab centrifuges, Fluostar Optima Plate reader, 4 x fume hoods, various small electrical equipment and pipettes
3			House 11 Glassware Washing Room 1.25	4	3 drying cupboards, dish washer und small electrical equipment
3	House 12 Office Room 0.01	1			
3	House 12 Office Room 0.08	1			
3			House 12 Glassware Washing Room 0.09	1	2 x drying cupboards, water deionisation system, autoclave, dish washer
3			House 12 Storage Room 0.10	0	
3			House 12 Storage Room 0.11	0	

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
3			House 12 Seminar Room 0.12/0.13	25	
3			House 12 Climatised Room 0.14	1	incubator
3			House 12 Cold Room + 4°C	1	
3			House 12 Technical Room 0.20		3 x freezers -80°C, water deionisation system
3			House 12 Storage Room 0.21		2 x -80°C, ice-machine, incubator, 6 x liquid nitrogen storage tanks
3	House 12 Office Room 0.25	3			
3			House 12 Lab 0.26	5	2 x PCR- Cycler, 2x real-time thermal cycler, 2 x nanophotometer, 2 x PCR-boxes, 2 x -20°C freezers, Bioanalyzer, 2 x fume hoods, 2 x lab centrifuges, various small electrical equipment and pipettes
3	House 12 Social Room 1.02	16			
3	House 12 Office 1.09	1			
3	House 12 Office 1.10	3			
3			House 12 Lab 1.11	2	2 x sterile safety cabinets, 2 x incubators, 2 x microscopes (1 x with camera), water bath (large), Xcelligene + laptop, 1x + 4°C/-20°C fridge freezer, lab centrifuge, various small electrical equipment and pipettes
3			House 12 Lab 1.12	3	2 x analytical scales, semi-dry blotter + power supply, gel documentation and analysis system + PC, fume hood, various small electrical equipment and pipettes

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
3	House 12 Office 1.15	1			
3			House 12 Lab 1.16	4	1 x sterile safety cabinet, 2 x centrifuges (large), +4°C/-20°C fridge freezer, fume hood, various small electrical equipment and pipettes
3			House 12 Lab 1.17		37°C room
3			House 12 Lab 1.18	2	Gel documentation and analysis system + PC, microtome, microscope
3			House 12 Lab 1.20	2	King Fisher, + 4°C/-20°C fridge freezer, various small electrical equipment and pipettes
3			House 12 Lab 1.22	1	Fast prep homogeniser, fume hood, various small electrical equipment and pipettes
3	House 12 Office 1.23	2			
3			House 12 Lab 1.24		Typhoon biomolecular imager, Ettan DALTsix electrophoresis unit, iMark plate reader, various small electrical equipment and pipettes
4	18	24	14	20	Chemical analyses, atomic absorption spectrometry, Chromatography (gas, HPLC), ion exchange chroamtography (Amino acids, biogenic amines), photometry, calorimetry, real time thermocycler, anaerobic working station, Ussing chambers, flow cytometry
5	R242 (RvO)	10	R249 (Rvo S3)	2	
5	R260 (RvO)	3	R250 (Rvo S3)	2	
5	R262 (RvO)	2	R248 (Rvo S3)	2	
5	R263 (RvO)	1	R254 (Rvo)	3	Bioreader
5	R264 (RvO)	2	R251 (Rvo)	2	
5	R261 (RvO)	6	R252 (Rvo)	1	
5	R106 (TZR)	2 out of 14	R253 (Rvo)	1	
5	R207 (TZR)	1	R231 (Rvo)	4	
5	R 208 (TZR)	2	R229 (Rvo)	4	
5	R213 (TZR)	4 out of 8	R219 (Rvo)	2	

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
5			R255-259 (RvO)	14	Zeiss M1 Fluoreszenz Mikroskop Chemi-Smart 5100 Imager Bio-Vision-3026 UV Imager Gene Pulser X-cell TriStar LB941 - ELISA/flourescence reader Bioreader 6000 Virus Counter Covaris - Fokused-Ultrasonikator CytoFLEX FACS Live cell imaging system VisoScope
5			R245 (TZR)	10	
5			R245a (TZR)	2	
5			R246a (TZR)	6	
5			R246 (TZR)	2	
6	4,5	18	7	9	State-of-the-art equipment for immunological and molecular work
7			114	1	media preparation
7			116	1	nutrient soil kitchen
7			117	1	nutrient soil kitchen
7			118	2	cell culture
7			119-122	10	Equipment for S2-Research Work; centrifuges, incubators, safety cabinet
7			127-129	8	Diagnostics; Vitek, PCR-machines, incubators
7			130	2	cell culture diagnostics
7			131 a-c	3	PCR/electrophoresis equipment
7			154-155	4	Research Lab; incubators, PCR-machines
7			156	2	Research Lab S2 + cell culture > lab equipment
7			157	2	Research Lab S2 > lab equipment
7			158	2	Research Lab S2 > lab equipment
7			159	1	Research Lab S2 > lab equipment
7			174		cold room
7			177	1	flouroscence microscopy

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
7			178		cold room
7			179		cold room
7			180	1	MiSeq
7			181		37°C-room
7			195	1	RT-PCR
7	111	2			
7	112	6			
7	113	6			
7	134	1			
7	135	1			
7	136	1			
7	137	1			
7	138	1			
7	139	6			
7	140	6			
8	9	11	5	8	Düppel Campus: desk with personal computers and monitors, laboratory equiment for bacteriological examinations (S2), media preparation room, wasting room
8	4	5	6	6	Mitte Campus: desk with personal computers and monitors, laboratory equiment for bacteriological examinations and molecularbiological examinations (S2), wasting room, PCR room
8	10	20	8	20	general microbiological and molecular laboratory equipment
10			1/222	11	
10			1/223	10	
10	1/ 002	1			
10	1/101	6			
10	1/206	1			
10	1/205	2			
10	1/204	1			
10	1/203	2			

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
10	1/202	2			
11	7	13			
12	1*	3			*all equipped with at least one pc workstation light microscope
12	1*	1			light microscope
12	1*	2			light microscope
12	1*	2			light microscope
12			1	2	Microtome, Biofuge, Hybridization Oven
12			1	1	Labofuge, Safty Bench, cell incubators (2), Speed Vac
12			1		Autoclave, Ice machine, lab dishwasher, heat sterilization oven
12	1*	1			light microscope (discussion unit, 1 observation head)
12	1*	1			light microscope
12	1*	1			light microscope
12	1*	2			Leica Slide Scanner (WSI), Olympus light and Fluorescence Microscope
12	2*	1			secretary (with computer workstation)
12	1	2			IT, printer
12	1	5			light microscope (discussion unit, 6 observation heads)
12	1	2			light microscope
12	1	1			light microscope
12			2	3	Real time PCR, 3 PCR, precision balance, Nano Drop, Precellys, Spectra Max Plus
12			1	2	Azure 600, Centrifuge 5804R, Equipment for SDS PAGE and Western Blot
12	1*	2			secretary (with computer workstations)
12	1*	1			light microscope (discussion unit, 1 observation head)
12	1*	1			light microscope (discussion unit, 4 observation heads)
12	1*	1			
12	1*	10			light microscope
12			3	6	4 microtomes, 3 cold plates, Equipment for Diagnostics

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
12			1		automatik tissue processor, Slide stainer, Coverslipper
12			1	2	tissue trimming workstation
12			1	2	Laser Microdissection
12			1		six -80°C ULF
12			1	2	isotope laboratory
12			1	1	laboratory organization
12	1*	2			
12	1*	2			
12			2	4	Microtome, IHC Staining
12			3	2	Demineralization / maceration
13	7	18	14	40	PCR, pyrosequencing, microbiological equipment, microinjection, cell culture, transfection
13	4	10	1	14	PCR, cell culture, microscopy
14	D147	2	D075	2	
14	D149	1	D155	1	telemetric EEG monitoring for mice
14	D150	1	D155a	2	anesthesia machine and scavenger system
14	D151	1	D156	2	Hera Safe KS 15 Safety Bench Hood Cabinet
14	D152	1	D159	2	CFX Connect Biorad Real-Time PCR System, VWR® Imager CHEMI Premium
14	D153	3	D161	2	IKA shaker KS 3000 ic control, Class 2 safety cabinet SafeFAST Premium
14	D157	2	D162	1	Leica DMi8
14	D158	2	D167	2	
14	D172	1	D168	2	
14	D167	1	D173	3	freezing microtome
14	D168	1	D173a	1	Bench Hood Cabinet
14	D173	1			
14	D079	2			
14	D075	3			
15	5	6	7	7	microbiological equipment

Scientific Unit	Staff Offices		Research Laboratories		
	Number of rooms	Number of places	Number of rooms	Number of places	Equipment
16	7	22			
17	15	33	1	5	basic laboratory equipment, 2 laminar flow cabinets
18			6	6	Research lab for ruminants and pigs, 2 autoanalyzers for blood biochemistry, 1 atomic absorbtion spectrometer, microscope, chloridmeter, hematology analyzer, hematology, cytology, 3 workbenches, PC's
18	14	22			desk, PC, closet
19	11	1 to 2	2	5	microscopes, 2 centrifuges, 1 fridge, 2 freezers, materials for analyzing samples, device for progesterone analysis, rapid on farm tests
20	23	45			

Appendix to 4.3.1. and 4.6.1.: Overview of the premises for housing healthy animals, research animals, hospitalised animals and of the premises for housing isolated animals and how these premises guarantee isolation and containment of infectious patients

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
2	Xenopus laevis			9.5	24					*
3	Honey bee		>30 colonies (>2 million bees)							
4	Cats			1 x 50 sqm	10					*
4	Dogs			9	10					*
4	Sows			15 x 9 sqm	30					*
4	Piglets			60 x 3 sqm	60					*
4	Laying hens/broilers			48 x 2 sqm	48					*
13	Mice			12	80					*
13	Gerbils			12	150					*
13	Rabbits			14-16	50					*
13	Dogs			12-20	24					*
13	Cats			12-20	18					*
13	Chicks			12-20	20					*

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
13	Pigs			12-20	30					*
13	Cows			12-20	18					*
13	Sheep or goats			12-20	30					*
13	Horses			12-20	9					*
14	Dogs ≤ 20 kg			3 rooms, 178 sqm	9					*
14	Mice			3 rooms, 90 sqm	2500					*
14	Sheep			1 room, 60 sqm	39					*
17	Horses	12	12	12	12	12	46	16	4	**
18	Bovine loose housing stable adults	150	max. 15							#
18	Bovine owner cow facility	17	1							#
18	Bovine owner cow facility	23	1							#
18	Bovine Quarantine stables					10	1			##
18	Bovine, new world camelids							12	2 adults	###

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		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
18	Bovine, shelter	100	3							
18	Small ruminant, shelter	22	3							
18	Bovine youngstock					3	2			#
18	Bovine youngstock					2	2			#
18	Small ruminants					2.3	4			#
18	Small ruminants					3.2	4			#
18	Small ruminants					5.5	1			#
18	Small ruminants					3.9	1			#
18	Calf/small ruminant					2.2	2			####
18	Goat shelter + yard	100	2							
18	Calf, hut + yard	10	2							
18	Bovine youngstock yard	183	2							

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
18	New world camelids yard and hut	250 sqm	2							
18	Bovine pasture		10							
18	Cows	327 sqm + pasture	23	327 sqm + pasture	23	1 room á 13 sqm 1 room á 14 sqm	4	1 room á 13 sqm 1 room á 14 sqm	4	# ## ###
18	Small ruminants	1 room á 102 sqm 1 room á 32 sqm + paddocks 1 room á 70 sqm 1 room á 92 sqm	30	1 room á 102 sqm 1 room á 32 sqm + paddocks 1 room á 70 sqm 1 room á 92 sqm	30	1 room with 2 boxes, 10 sqm each	2 to 8, depending on originating flock	1 room with 2 boxes, 10 sqm each	2 to 8 depending on originating flock	# ## ####
18	Calves	1 room á 102 sqm + paddock 1 room á 70 sqm	6	1 room á 102 sqm + paddock 1 room á 70 sqm	6	1 room á 31 sqm	up to 6, depending on originating herd	1 room á 31 sqm	up to 6, depending on originating herd	# ## ###

Appendix to 4.3.1. and 4.6.1.: Overview of the premises for housing healthy animals, research animals, hospitalised animals and of the premises for housing isolated animals and how these premises guarantee isolation and containment of infectious patients

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
18	Pigs	1 room á 32 sqm and paddock room á 92 sqm	2	1 room á 32 sqm and paddock room á 92 sqm	2					
18	Pigs, adult	26	14							
18	Pigs, growers	25	71							
18	Pigs, finishers	48	47							
18	Pigs, piglets	7	22							
18	Pigs, general					20	30	9	2	§
18	Chickens & Turkeys	2 rooms á 9 sqm	14	5 room á 17 sqm – 19 sqm	226	0.36	3 (for chickens or pigeons)	0.59	4 (for chickens or pigeons)	§§
18	Pigeons	36	50							
20	Dogs						46	42	10	$
20	Cats						25	11.5	16	$
20	Pets (guinea pigs, rabbits, caged birds, reptiles)						10	28	3	$

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
20	Wild animals (birds of prey, hedgehogs, water fowl etc.)						15	28	12	$
5, 6, 7, 10 RvO	Chickens			8 rooms, 10.03-10.77 sqm	1920					*
5, 6, 7, 10 RvO	Pigs			6 rooms, 0.03-10.77 sqm	302					*
5, 6, 7, 10 RvO	Mice			4 rooms, 9.76-15.08 sqm	3370					*
5, 6, 7, 10 RvO	Rats			6 rooms, 10.03 sqm	135					*
5, 6, 7, 10 RvO	Gerbils			1 room, 9.76 sqm	280					*
5, 6, 7, 10 RvO	Hamsters			6 rooms, 10.03 sqm	504					*
5, 6, 7, 10 RvO	Rabbits			6 rooms, 10.03 sqm	30					*
5, 6, 7, 10 TZR	Chickens			18 romms, 12.3-81.45 sqm	1170					*
5, 6, 7, 10 TZR	Pigs			18 rooms, 12.3-81.45 sqm	692					*
5, 6, 7, 10 TZR	Mice			18 rooms, 12.3-16.71 sqm	16704					*
5, 6, 7, 10 TZR	Rats			17 rooms, 12.3-13.88 sqm	4800					*

Appendix to 4.3.1. and 4.6.1.: Overview of the premises for housing healthy animals, research animals, hospitalised animals and of the premises for housing isolated animals and how these premises guarantee isolation and containment of infectious patients

Scientific Unit	Species	Healthy animals		Research animals		Hospitalised animals		Isolated animals		How to guarantee isolation and containment of infectious patients
		Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	Size of individual premises/ rooms used for housing in sqm	Total number of animal places	
5, 6, 7, 10 TZR	Gerbils			17 rooms, 12.3-13.88 sqm	6720					*
5, 6, 7, 10 TZR	Hamsters			17 rooms, 12.3-13.88 sqm	5760					*
5, 6, 7, 10 TZR	Rabbits			17 rooms, 12.3-13.88 sqm	580					*
5, 6, 7, 10 TZR	small ruminats			8 rooms, 13.88-81.45 sqm	100					*
5, 6, 7, 10 TZR	cattle (< 100kg)			2 rooms, 13.88-81.45 sqm	33					*
5, 6, 7, 10 TZR	cattle adult			2 rooms, 13.88-81.45 sqm	14					*
5, 6, 7, 10 TZR	dogs			6 rooms, 13.88 sqm	24					*
5, 6, 7, 10 TZR	salmonids (up to 500 g)			1 room, 15.73 sqm	72					*

* Experimental animal housing without patient care: with access control, sluices at each room, complete change of clothing, exhaust air, waste water and waste decontamination.

** The horses are kept in a separate box with a hygiene lock for alle attending persons. All persons attending the patients are informed about hygienic measures. There is a separate room with stocks for treatment of the isolated patients. All equipment or medicatiens are used only in the isolation unit.

Facilities for cleaning and disinfection are provided, a walk-through disinfection tub is installed at the entrance, in case an infection is detected the unit will be closed and access will be limited to animal care takers of the unit

In the stables of the quarantine unit, cattle of only a single farm of origin are hospitalized, there isone ventilator per unit, physical contacts between animals of different farms are avoided, halsters have to be cleaned and disinfected before the next use, walk-through disinfection tubs are placed in front of each stable; inbetween the stables there are facilities for washing, cleaning, disinfection of hands and clothing including boots. A standard operating procedure has to be followed for cleaning and disininfection of stables.

isolation units are equipped with separate facilities for material supply (incl. Single use coveralls, gloves, aprons) cleaning and disinfection, stables can be entered via the cleaning and disinfection unit, walk through disinfection tubs are placed in front of the doors rules for isolation units are the same as given above for quarantine stables

isolation units for small ruminants and calves suspected from infectious diseases, completely separated from other rooms, separate door, storage for single use clothing and materials, facilities for cleaning and disinfection, separate materials

§ hospitalised animals are either bought for education purpose and are kept within the main stable (reducing thereby the available space for healthy pigs), hospitalised pigs in cases of individual (pet) pig patients and pigs suspected from infectious diseases are kept within the isolation unit for pigs with completely separated from other rooms, separate door, storage for single use clothing and materials, facilities for cleaning and disinfection, separate materials

§§ Quarantine stable/boxes for Poultry, seperated rooms for animal groups, specific clothing and shoes for each animal group

$ Each of these isolation facilities feature a separate sluice and an area equipped with sufficient storage capacity for consumables including feed and bedding material. In the sluices, clothes/overalls and shoes are changed.

Appendix to 4.3.2. and 4.3.3.: Overview of the premises for clinical activities and diagnostic services including necropsy and of the equipment used for clinical services

Scientific Unit	Premises for	Disciplines	Species	Number	Size in sqm	Equipment
4	Diagnostic services	Animal Nutrition	pigs, chicken	1	10	Table, instruments for dissection
5	diagnostic services	Virology diagnostic	equine	4	41.55	
7	Diagnostic services	Microbiology	all	14	238.47	Microbiological incubators, light microscoy, stereomicroscopy, fluorescence microscopy, VITEK2compact (Bacterial indentification and AST), Illumina Miseq MALDI TOF MS, Thermocycler
12	diagnostic services including necropsy	necropsy hall	all	3	115	complete equipment for autopsy of animals up to 1000kg including band saw, various autopsy tables, safety workbench, …
12	diagnostic services including necropsy	diagnostic histopathology	all	1	35	light microscope (discussion unit, 6 observation heads)
12	diagnostic services including necropsy	diagnostic histopathology	all	1	18	light microscope (discussion unit, 4 observation heads)
13	Diagnostic services	Parasitology	all	4	20	Microscopy, Flotation devices, ELISA
15	surgery	surgery	poultry, pigeon and pet animals	1	19.9	anaesthesia, surgery-equipment
15	treatment	treatment	poultry, pigeon and pet animals	1	25.8	diagnostical and treatment-equipment
17	clinical activities	orthopedics	horses	1	35	Materials for diagnostic anesthesia, sedation, bandage changes, wound treatment, hoof tester and knives
17	clinical activities	dental exam	horses	1	27	mouth gag, head lamps, mirrors and probes for dental exam, float for dental treatment, dental and sinus endoscopy, equipent for tooth extraction
17	clinical activities	radiology	horses	1	37	x-ray machine/digital radiography
17	clinical activities	ultrasonography	horses	1	29	Toshiba aquilon with linear, micro-and microconvex probes
17	clinical activities	surgery soft tissue	horses	1	54	Sedation/induction stocks, crane, surgery table for horses, Screens for diagnostic images, arthroscopy equipment, c-arm, various surgical instruments, anestthesia mashine, recovery stall

Scientific Unit	Premises for	Disciplines	Species	Number	Size in sqm	Equipment
17	clinical activities	surgery orthopedic	horses	1	54	Sedation/induction stocks, crane, surgery table for horses, Screens for diagnostic images, arthroscopy equipment, c-arm, various surgical instruments, anestthesia mashine, recovery stall
17	clinical activities	internal medicine	horses	1	35	Stocks, endoscopy, ultrasonography, equipment for examination of the gastrointestinal tract, biopsies and diagnostic punctures and ophtalmologic examinations
17	clinical activities	internal medicine	horses	1	36	Stocks, endoscopy, ultrasonography, equipment for examination of the gastrointestinal tract, biopsies and diagnostic punctures and ophtalmologic examinations
17	clinical activities	examination of isolated patiens	horses	1	30	Stocks, equipment for examination of the gastrointestinal tract, biopsies and diagnostic punctures
18	clinical activities	surgery (aseptic laparotomy)	bovine (adult), pigs (adult)	1	44	chute, instruments, autoclave
18	clinical activities	surgery (septic) laparotomy eg. ruminotomy	bovine (adult)	1	50	chute, mobile surgery tables (2)
18	clinical activities	surgery (recumbency)	bovine, small ruminants pigs	1	20	surgical table
18	clinical activities	radiology	bovine, small ruminants, pigs	1	10	diagnostic digital x-ray unit
18	clinical activities	diagnostic ultrasound	bovine, small ruminants, pigs	1		2 mobile ultrasound units
18	clinical activities	endoscopy	bovine, small ruminants, pigs	2		1 m fiberscope, 1,90 m fiberscope, 2 sets for endoscopic surgery (abomasal displacement)
18	clinical activities	hoof trimming chute		2		
18	clinical activities	treatment area	small ruminant	1	20	examination table, instrument cabinet, washbasin
19	clinical activities	male and female reproduction	cattle, small ruminants	8	685	7 ultrasound devices, 3 fixation devices for cattle and small ruminants, 1 phantom for boars, 3 microscopes, 1 endoscope, surgical instruments

Scientific Unit	Premises for	Disciplines	Species	Number	Size in sqm	Equipment
19	clinical activities	male and female reproduction	cats and dogs	3	68	2 ultrasound devices, 1 microscope, 1 endoscope + accessories, 2 dog simulators, puppy simulators, surgical instrument, consumables (syringes, needles, etc.), heatable litter box, Pc + 2nd monitor, treatment table, specula, obstetric insruments, Staining bench for cytology smears, medications, centrifuge, Cryo conversation accessories
20	clinical activities	diagnostic, treatment in ambulatory clinics	dog, cat	1	370	five examination table, examination light, stethoscope, thermometer, focal light source (e.g. otoscope), instruments for neurologic assessment and blood pressure measurement, emercency wardrobe with instruments for intubation and ventilation, O2 supplementation, consumables
20	clinical activities	diagnostic, treatment in ambulatory clinics	dog, cat	5	See ambulatory clinics	one examination table, examination light, stethoscope, thermometer, focal light source (e.g. otoscope), consumables
20	clinical activities	diagnostic, treatment in ambulatory clinics	small mammals, exotics, birds	1	See ambulatory clinics	examination table, examination light, stethoscope, thermometer, focal light source (e.g. otoscope), instruments for dental examination, consumables
20	clinical activities	infusion therapy	dog, cat, small mammals, exotics, birds	1	See ambulatory clinics	4 cages with infusion pump for ambulatory and emercency paptients
20	clinical activities	diagnostic, treatment of stationary patients	dogs, cats, small mammals, exotics, birds	8	350	examination table, examination light, stethoscope, thermometer, focal light source (e.g. otoscope), instruments for dental examination, consumables
20	clinical activities	cytology	dog, cat, small mammals, exotics, birds	1	See ambulatory clinics	dye bank, 5 light microscopes, one with fellow observer essay and monitor
20	clinical activities	ultrasonography	dog, cat, small mammals, exotics, birds	1	See ambulatory clinics	2 ultrasound machines with multiple linear and concave transducers
20	clinical activities	ophthalmology	dog, cat, small mammals, exotics, birds	1	26	2 slitlamps, 3 tonometers, 4 ophthalmoscopes with various lenses, consumables and instruments for ophthalmic examination
20	clinical activities	cardiology	dog, cat, small mammals, exotics, birds	1	See ambulatory clinics	ultrasound machine with various transducers, ECG, blood pressure measurement

Scientific Unit	Premises for	Disciplines	Species	Number	Size in sqm	Equipment
20	clinical activities	anaesthesia	dog, cat, small mammals, exotics, birds	5	See surgery	7 anesthetic machines with monitoring and infusion pumps, bair hugger
20	clinical activities	surgery	dog, cat, small mammals, exotics, birds	3	120	1 preparation and 6 surgical tables and instruments for soft tissue, orthopedic, neurologic and ophthalmic surgery and endoscopy
20	clinical activities	radiology	dog, cat, small mammals, exotics, birds	1	68	digital radiography, fluoroscopy
20	clinical activities	computer tomography	dog, cat, small mammals, exotics, birds	1	21	spiral CT
20	clinical activities	dental care	dog, cat, small mammals, exotics, birds	1	12	dental care unit with instruments for prevention and treatment of dental problems

Appendix to 4.4.1.: Opening days and times for all animal clinics

Clinic	Consultations			Emergency service	
	Type	Days	Opening hours	Clinic	Ambulatory clinic
Farm Animal Clinic	Division for Poultry consultations	Mon-Fri	9:00 a.m. - 3:00 p.m.	Not applicable	See footnote*
	Division for Ruminants & Camelids consultations	Mon-Thu	07:30 a.m. - 4:00 p.m.	Standby service: Sat & Sun 8:00 a.m. - 12:00 a.m.; On-call service outside Business hours and outside Standby service on Sat & Sun - timely suspended	on-call service for contract-related farms: 24h/day/year
		Fri	07:30 a.m. - 3:00 p.m.		
	Division for Pigs consultations	Mon-Fri	07:30 a.m. - 4:00 p.m.	Not applicable	See footnote**
Equine Clinic	General Consultations	Mon-Fri	8:00 a.m. - 4:00 p.m.	24h/day/year	
	Ophthamology	Mon and Thu	8:00 a.m. - 12:00 p.m.		
Small Animal Clinic	Internal medicine consultations	Mon-Fri	09:30 a.m. - 1:00 p.m.	Mon-Fri 08:00 a.m. - 06:00 p.m.	
	Surgery & orthopaedic consultations	Mon-Fri	09:30 a.m. - 1:00 p.m.		
	Ophthamology	Mon, Wed	10:00 a.m. - 12:00 p.m. and 1:00 p.m. - 2:30 p.m.		
		Thurs	12:30 p.m. - 3:30 p.m.		
	Dermatology	Tue, Wed, Thur	09:30 a.m. - 1:00 p.m.		
	Cardiology	Mon, Thur	09:30 a.m. - 12:00 p.m.		
	Small mammals, birds and reptiles	Tue, Thur	10:00 a.m. - 11:30 p.m. and on demand		

*Ambulatory excursion to poulty farms in the context of clinical training (every other week, 19 excursions per year)

**Ambulatory excursion to pig farms in the context of clinical training

Appendix to 4.8.1.: Overview of vehicles operated by the VEE

Einrichtung / Klinik	Number of vehicles	Type	Number of seats	Students transportation	Ambulatory clinics	Live animals transportation	Cadavers transportation	Others
Veterinary Anatomy	1	VW vans (closed panel)	3				X	
Animal Nutrition	1	VW Bus	8	X				
	1	Horse-boxes				X		
Food Safety and Food Hygiene	1	MAN TGL 10.180 4x2 BL	3				X	
	1	Focus Concept hatchback	5	X				
Animal Hygiene and Environmental Health	1	VW T6 estate van	8	X				
Parasitology and Tropical Veterinary Medicine	1	VW Passat estate	8	X				
	1	Daimler 113 CDI estate	8	X				
	1	Lohmann trailer						X
Equine Clinic	1	VW Sharan	5	X				
	2	Weidemann					X	
	1	Motorised horse-boxes	1			X		
	1	Ford Transit Tourneo	8	X				
Farm Animal Clinic	1	VW T5 estate van	8	X				
	1	Iveco towing vehicle				X		
	1	MAN cattle truck				X		
	1	Menke axle trailer				X		
	1	VW T4 van			X			
	1	VW Passat	5	X				
	2	VW Golf Variant	5	X				
	1	VW Caddy maxi TGI	5	X				
	1	VW T6 van	5	X				
	1	Trebbiner trailer						X
	1	WOPA						X
	2	VW Golf	5	X				
	1	Seat Alhambra	7	X				
Dean's Office	1	Mercedes Sprinter	3				X	X
	1	Brenderup trailer						X

Appendix to 4.9.: Hygiene Regulations of the School of Veterinary Medicine, Screenshots of the Work, Health and Environmental Management System (AGUM, German version) and AGUM Checklist for Institutes and Clinics of the VEE

Hygiene regulations of the School of Veterinary Medicine at Freie Universität Berlin

with measures to prevent the introduction and spread of infectious zoonotic and/or infectious animal pathogens in the facilities of the School of Veterinary Medicine and to protect employees and students from infections

Status 28.02.2024

Preamble

These regulations serve to minimise the risk of the introduction, spread and discharge of animal diseases and infectious agents into and out of the facilities of the School of Veterinary Medicine at Freie Universität (FU) Berlin and thus to be able to maintain the operation of the school even in times of concrete animal disease risks. In addition, these regulations also regulate basic measures to protect employees, visitors and students from infection.

These regulations therefore apply to all facilities, employees, students and doctoral candidates of the School as well as employees of the Technical department, employees of external companies and visitors and guests of the School's facilities.

The individual clinics and institutes ("institutions") of the School of Veterinary Medicine of the FU Berlin are responsible for the implementation of these regulations. The respective managing directors of the institutions must therefore initiate appropriate measures and monitor their implementation. They may delegate the implementation/execution of these tasks, but remain responsible for them.

Official instructions/regulations of the Berlin-Zehlendorf Veterinary authority remain unaffected by these hygiene regulations and must be implemented independently of them without restriction.

When implementing the measures of these hygiene regulations, however, the regulations to be agreed between the School of Veterinary Medicine of the FU Berlin and the Berlin-Zehlendorf Veterinary authority regarding the definition of "flocks" (e.g. all poultry of the School) and/or sub-flocks (e.g. poultry of the Institute of Poultry Diseases) must be taken into account. All facilities that belong to an animal health unit in accordance with this regulation on the definition of "flocks" of the school must implement standardized or comparable measures in accordance with the following requirements.

General measures

The general measures of these regulations apply generally and continuously and are to be applied by all facilities of the FB regardless of a concrete, specific animal disease or infection risk.

As general measures to prevent the introduction and spread of animal diseases and infectious agents in facilities of the School of Veterinary Medicine and to protect employees and students from infections, they must generally ensure that:

- patients of the clinics are initially placed individually (or poultry and piglets in origin-specific groups) on admission (quarantine) and examined for clinical signs of an existing animal disease or infectious disease. In the event of any structurally/spatially justified or necessary deviations from this, alternative logistical measures for which the facility manager is responsible (e.g. animals for training are not returned to the farms of origin or all animals in the unit are treated

as an epidemic hygiene unit) must be taken to ensure that these animals/animal groups do not pose a risk of spreading within the FB or to farms outside the FB.

- The basic hygiene precautionary measures must be observed when employees and students visit farms or veterinary practices:

  - for employees, use of the clinic's own protective clothing, but at the same time different from the clinic's operations (for each individual stock visited, labelled if possible) and different footwear (labelled if possible)

  - for students Use of protective clothing to be provided by the respective clinic or WE (usually disposable gowns and disposable gloves) for each individual stock visited

  - for students use of own (owned by the students), waterproof and disinfectable footwear (usually rubber boots)

  - Use of the clinic's own equipment (labelled) and materials, which are different from those used in the clinic, separately for each individual inventory visited

  - *at the* end of the visit and *before* entering the clinics and institutes of the FB or other facilities or farms:

    1. Thorough disinfection or sterilisation of all materials (sampling equipment, etc.) and equipment used during the stock exits
    2. Harmless disposal of disposable gowns and gloves (as category B waste, separate collection, disposal via household waste; if contact with infectious agents is detected, as category C waste, separate collection and disposal i) with the C waste of the clinics/institutes (household waste after sterilisation), or ii) via the Institute of Pathology (carcass disposal) or iii) Remondis (incineration).
    3. Thorough disinfection of the footwear
    4. Thorough disinfection of the hands

  For the hygiene measures described above, appropriate facilities (storage space for rubber boots, dispensers for overshoes, collection containers for disposable gowns, disinfection tubs, information on hand disinfection stations, etc.) must be provided in all affected clinics and institutes in consultation with the Schoolal hygiene officer. The collection and disposal of infectious or infectious-hazardous waste, including animal by-products, is standardised in an annex to these hygiene regulations.

It must also be ensured that

- All employees, students and doctoral candidates of the school as well as employees of the technical services and caretakers, employees of external companies must be informed about the hygiene risks before entering the clinics and laboratory areas of the institutes and they must make a written declaration that they have complied with the above-mentioned hygiene rules regarding clothing, footwear and hand disinfection before and after visiting other animal facilities. Visitors and guests must also be instructed accordingly for the areas concerned. A written declaration may be omitted in this case if these persons are always supervised in the areas at risk.

- Employees, students and doctoral candidates of the school as well as employees of the technical services and caretakers, employees of external companies as well as visitors and guests within the Düppel campus must use the least hygienic (and generally shortest) route to the respective facilities, whereby the proximity to obvious sources of contamination, such as dung heaps, excrement and animal stables on the way to the respective facilities must be avoided. In consultation with the FB hygiene officer and the dean's office, signs should be placed at any critical points on the FB premises. A route map for vehicles and persons with barriers to be defined will be created as an appendix to these hygiene regulations and, if necessary, specified depending on the existing risk situation/animal epidemic.

- All clinics and institutes of the School of Veterinary Medicine have an individual hygiene plan for the protection of employees (including pregnant women who are not allowed to carry out work/activities from safety level S2 and clinical activities with a risk of infection, more details are set out in the respective internship regulations or in an annex to these hygiene regulations) and visitors, in which all employees of the institution are instructed, which contains the points set out in these regulations as a minimum requirement and which is available to the School of Hygiene Officer and the Dean's Office.

- All institutions for the courses for which they are responsible (e.g. practical exercises, laboratory courses, clinical demonstrations and exercises) must establish the necessary measures to protect students (including pregnant women, who are not allowed to participate in courses with activities from safety level S2 and clinical exercises with a risk of infection, more details are set out in the respective internship regulations or in an annex to these hygiene regulations) from infection with infectious agents and enforce their implementation through documented instructions, controls and, if necessary, restriction measures.

- Personnel involved in dissections and laboratory tests for the detection of infectious and epizootic pathogens are not allowed access to animal houses of the FB's own or other facilities and to other facilities and farms with susceptible animal species, or only after strict hygiene measures for personal hygiene (complete change of clothing and disinfection of hands at least twice) and appropriate documentation. These protective measures must be developed in consultation with the FB hygiene officer.

- All facilities of the School of Veterinary Medicine only keep as many animals as can be kept in accordance with the criteria of biosecurity required in the event of an animal epidemic (closed stables with personal control).

- All facilities of the School of Veterinary Medicine that keep animals must, in consultation with the schools Hygiene Officer, the schools Animal Welfare Officer and the competent veterinary office, provide the necessary basic equipment for the humane killing of the species concerned without the withdrawal of blood.

- All facilities of the School of Veterinary Medicine that keep animals must keep their respective feed stores inaccessible to wild animals (including birds) and rodents and also carry out regular rodent control, which must also be documented (e.g. location of bait boxes, type of bait, bait findings).

- The access of visitor groups to clinics/institutes with visitors with previous (within the last 3 days) contact with animals of the respective species i) must be limited to the absolute minimum necessary, ii) these visitors must be informed accordingly, iii) hands and footwear must be thoroughly disinfected before entering the animal husbandry areas and a protective gown must be worn.

- The access of dogs, cats and other animals is strictly prohibited in all facilities of the school. The only exceptions are patient animals and animals used for teaching and/or experimental purposes. In this context, reference is also made to FU Circular V1/83 on bringing dogs and other animals into official buildings of Freie Universität Berlin.
  Dogs must generally be kept on a lead on the streets and paths of the school. This must be indicated by signs at the entrances to the school.

In addition, all of the school's locations and facilities must be secured against unauthorised access/entry at weekends and in the evening and after hours (5 p.m. to 7 a.m.). To this end, the school must draw up binding access regulations (e.g. locking plan, locking service, monitoring) for the two areas south and north of Königsweg and for the Domäne Dahlem, Koserstraße, Dahlem and Bad Saarow sites, as a result of which only restricted access is possible at weekends and in the evening and after-hours. A corresponding closure regulation will be drawn up as an annex to these hygiene regulations.

Special measures in the event of a specific animal disease risk

The special measures of these regulations apply in the ***event of a concrete, specific animal infectious disease risk*** and are to be applied by certain institutions of the FB depending on the animal disease occurring (and thus the target animal species). All officially ordered measures remain unaffected.

The date of entry into force and the specific design of the measures listed below as well as the designation of the "facilities at risk" will be agreed between the heads of these facilities and the Dean's Office and the Hygiene Officer of the School of Veterinary Medicine with the involvement of the responsible authority or the responsible official veterinarian.

As specific measures to prevent the introduction and spread of animal disease pathogens, in the event of a specific animal disease risk in particularly endangered clinics and institutes, it must generally be ensured that:

- The students and employees as well as the employees of the operating technology and caretakers are continuously informed by the School representatives (clinic and institute directors, involved university lecturers, School hygiene officer, veterinarians) in coordination with the dean's office and the School hygiene officer about the specific animal disease risk and are instructed by means of instructions, instructions and information sheets about the following measures and their situation-specific specific design in accordance with these School hygiene regulations.

- All entrances to affected clinics and institutes are labelled accordingly as access-restricted facilities and the specific biosecurity measures are pointed out there. This is done in consultation with the Dean's Office and the School's hygiene officer.

- Employees, students, doctoral students, technical staff and caretakers as well as visitors are not permitted to enter the affected clinics and institutes until at least one week (or after a different period to be determined by the facility managers together with the Dean's Office, the Schoolal Hygiene Officer and, if applicable, the responsible official veterinarian) after visiting a herd with target animal species affected by the animal disease and must also sign to confirm that this waiting period has been observed. This also applies to persons authorised to hunt (hunters) after contact with wild animals or materials relevant to the epidemiology of the respective animal disease.

- Employees, students, doctoral students, technical staff and caretakers as well as visitors may not enter the affected clinics and institutes until at least one week (or after another period to be determined by the heads of the facilities together with the Dean's Office, the FB hygiene officer and, if necessary, the responsible official veterinarian) after their stay in a FB facility with target animal species affected by the animal disease and must also sign a declaration of compliance with this waiting period. This does not apply to FB facilities affected by the animal disease (animal disease case, suspected animal disease) that are subject to official controls and whose employees are prohibited from making such visits anyway.

- In every facility (clinics and institutes with animal husbandry) there are options for controlling access to persons and these are utilised accordingly. Visitor traffic must be limited to what is absolutely necessary and a visitor log must be kept. The standardised procedure for this is to be developed in consultation with the Schoolal Hygiene Officer and the Dean's Office.

- In every facility (clinics and institutes with animal facilities) there are facilities for disinfecting footwear, disinfecting hands and, where necessary, changing clothes, and students, technical staff and caretakers as well as visitors must disinfect themselves accordingly (footwear and hands) and, if necessary, change clothes before entering.

- All locations of the School with animal species relevant to the respective animal disease and kept at the School must be secured against unauthorised access/entry during business hours (7.00 am to 5.00 pm) and outside of business hours. For this purpose, binding access regulations (e.g. entry and exit regulations, locking plan, locking service, monitoring) must be drawn up by the School for the two areas south and north of Königsweg and for the Domäne Dahlem, Koserstraße Dahlem and Bad Saarow sites. A corresponding regulation will be drawn up as an annex to these hygiene regulations.

- All vehicles must be appropriately disinfected (tyre disinfection) before entering the FB grounds (entrances Oertzenweg, Königsweg, Domäne Dahlem, Koserstraße Dahlem and Bad Saarow). The necessary materials for this (tyre disinfection tub/mats, high-pressure cleaning and disinfection equipment, disinfectant, tents for roofing) must be kept in stock by the FB and FB employees must be regularly trained in their set-up and use.

- Employees, students and doctoral students of the School as well as employees of the technical services and caretakers, employees of external companies as well as visitors and guests within the School may only use specially designated routes, bypassing the affected clinics. In consultation with the Schoolal Hygiene Officer and the Dean's Office, signs are to be put up at critical points on the School's premises if necessary. A corresponding route map for vehicles and persons with barriers to be defined will be created as an appendix to these hygiene regulations and specified depending on the existing risk situation/animal epidemic.

- visits to holdings with animal species affected by the animal disease will no longer be carried out.

- No more patients of animal species susceptible to the respective animal disease will be admitted to the FB clinics.

- The existing patients of affected clinics or animal species should be discharged as quickly as possible, provided that no signs of animal disease or infection are detected and the official animal disease regulations still permit this.

- Any animals of susceptible animal species still present (animals belonging to the institute and clinic and patients not discharged) must be closely examined for clinical symptoms of the respective animal disease.

- The transfer of animal material/animals to the Institute of Pathology and of sample material to other facilities must always be carried out by separate personnel who are not involved in animal care at the sending institution and who must disinfect themselves accordingly (see above) and, if necessary, change clothes when re-entering the sending institution.

For clinics and institutes with experimental animal husbandry of laboratory animals susceptible to the respective animal disease, the following applies in addition to the above-mentioned regulations:

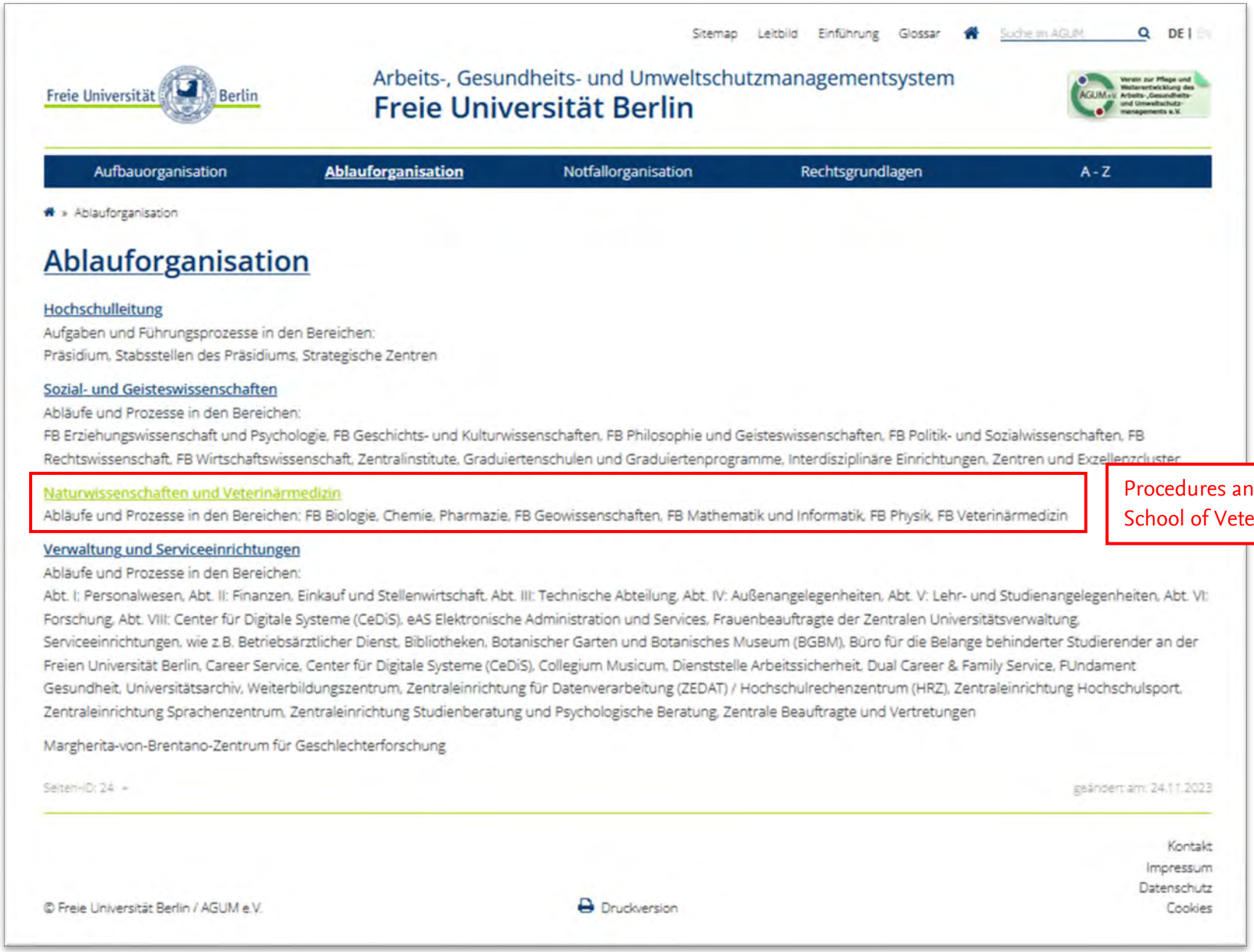
- All available structural possibilities must be utilised to separate these institutes from the FB's livestock clinics.
  Due to the special spatial proximity, this applies in particular to the Robert von Ostertag House, where the two side gates to the FB and the two rear exits in the direction of the reproduction and cloven-hoofed animal clinic (which then only function as escape routes) must be firmly closed in the event of a specific animal disease risk. In this case, access for persons and deliveries will be exclusively via the main entrance on Robert-von-Ostertag-Straße and only transponder-controlled (persons) or via the secretariats (deliveries).

- Employees with access to the laboratory animal area of these clinics and institutes or persons involved in the care of laboratory animals and/or animal experiments are strictly prohibited from visiting the clinics relevant to the animal disease without exception. The transfer of animal material from the experimental animal facilities to the Institute of Pathology, of sample material to other facilities and of bedding for disposal must always be carried out by personnel not involved in experimental animal care. The transfer of these materials takes place at the respective material locks of the animal facilities.

These regulations came into force with the decision of the Faculty Council on 9 July 2015 and were updated on 16 May 2019 and 29 October 2020 by decision of the Faculty Council.

Screenshots of the Work, Health and Environmental Management System of Freie Universität Berlin (AGUM, German version only)

Structural organisation



Sitemap Leitbild Einführung Glossar Suche im AGUM DE | En

Freie Universität Berlin

Arbeits-, Gesundheits- und Umweltschutzmanagementsystem
Freie Universität Berlin

Aufbauorganisation | Ablauforganisation | Notfallorganisation | Rechtsgrundlagen | A - Z

» Ablauforganisation

Ablauforganisation

Hochschulleitung
Aufgaben und Führungsprozesse in den Bereichen:
Präsidium, Stabsstellen des Präsidiums, Strategische Zentren

Sozial- und Geisteswissenschaften
Abläufe und Prozesse in den Bereichen:
FB Erziehungswissenschaft und Psychologie, FB Geschichts- und Kulturwissenschaften, FB Philosophie und Geisteswissenschaften, FB Politik- und Sozialwissenschaften, FB Rechtswissenschaft, FB Wirtschaftswissenschaft, Zentralinstitute, Graduiertenschulen und Graduiertenprogramme, Interdisziplinäre Einrichtungen, Zentren und Exzellenzcluster

Naturwissenschaften und Veterinärmedizin
Abläufe und Prozesse in den Bereichen: FB Biologie, Chemie, Pharmazie, FB Geowissenschaften, FB Mathematik und Informatik, FB Physik, FB Veterinärmedizin

Procedures and processes at the School of Veterinary Medicine

Verwaltung und Serviceeinrichtungen
Abläufe und Prozesse in den Bereichen:
Abt. I: Personalwesen, Abt. II: Finanzen, Einkauf und Stellenwirtschaft, Abt. III: Technische Abteilung, Abt. IV: Außenangelegenheiten, Abt. V: Lehr- und Studienangelegenheiten, Abt. VI: Forschung, Abt. VIII: Center für Digitale Systeme (CeDiS), eAS Elektronische Administration und Services, Frauenbeauftragte der Zentralen Universitätsverwaltung, Serviceeinrichtungen, wie z.B. Betriebsärztlicher Dienst, Bibliotheken, Botanischer Garten und Botanisches Museum (BGBM), Büro für die Belange behinderter Studierender an der Freien Universität Berlin, Career Service, Center für Digitale Systeme (CeDiS), Collegium Musicum, Dienststelle Arbeitssicherheit, Dual Career & Family Service, FUndament Gesundheit, Universitätsarchiv, Weiterbildungszentrum, Zentraleinrichtung für Datenverarbeitung (ZEDAT) / Hochschulrechenzentrum (HRZ), Zentraleinrichtung Hochschulsport, Zentraleinrichtung Sprachenzentrum, Zentraleinrichtung Studienberatung und Psychologische Beratung, Zentrale Beauftragte und Vertretungen

Margherita-von-Brentano-Zentrum für Geschlechterforschung

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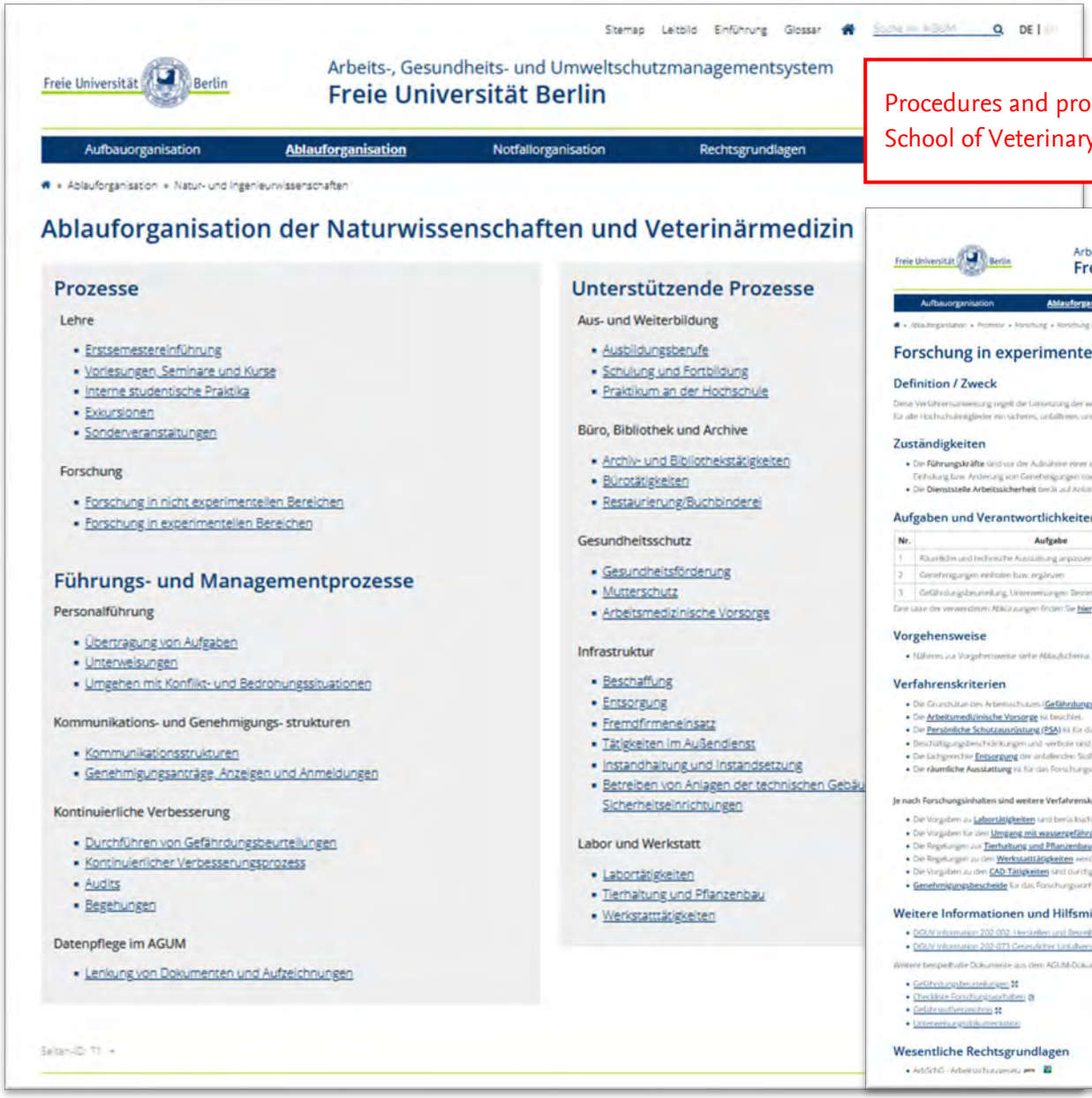
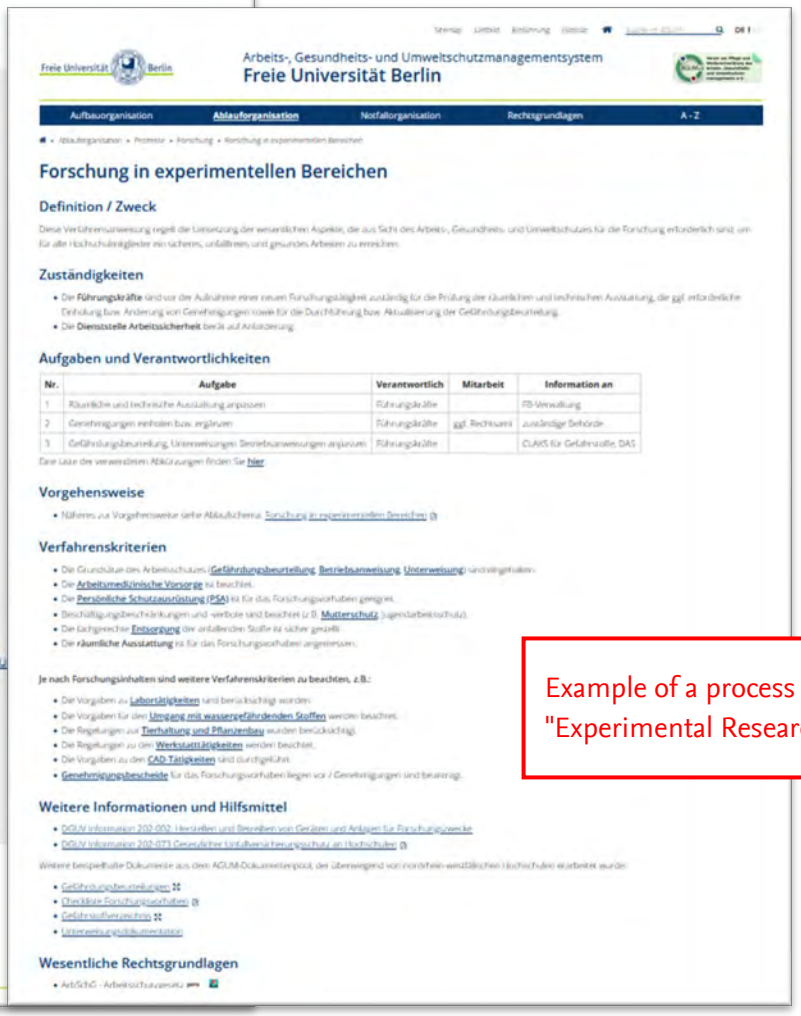
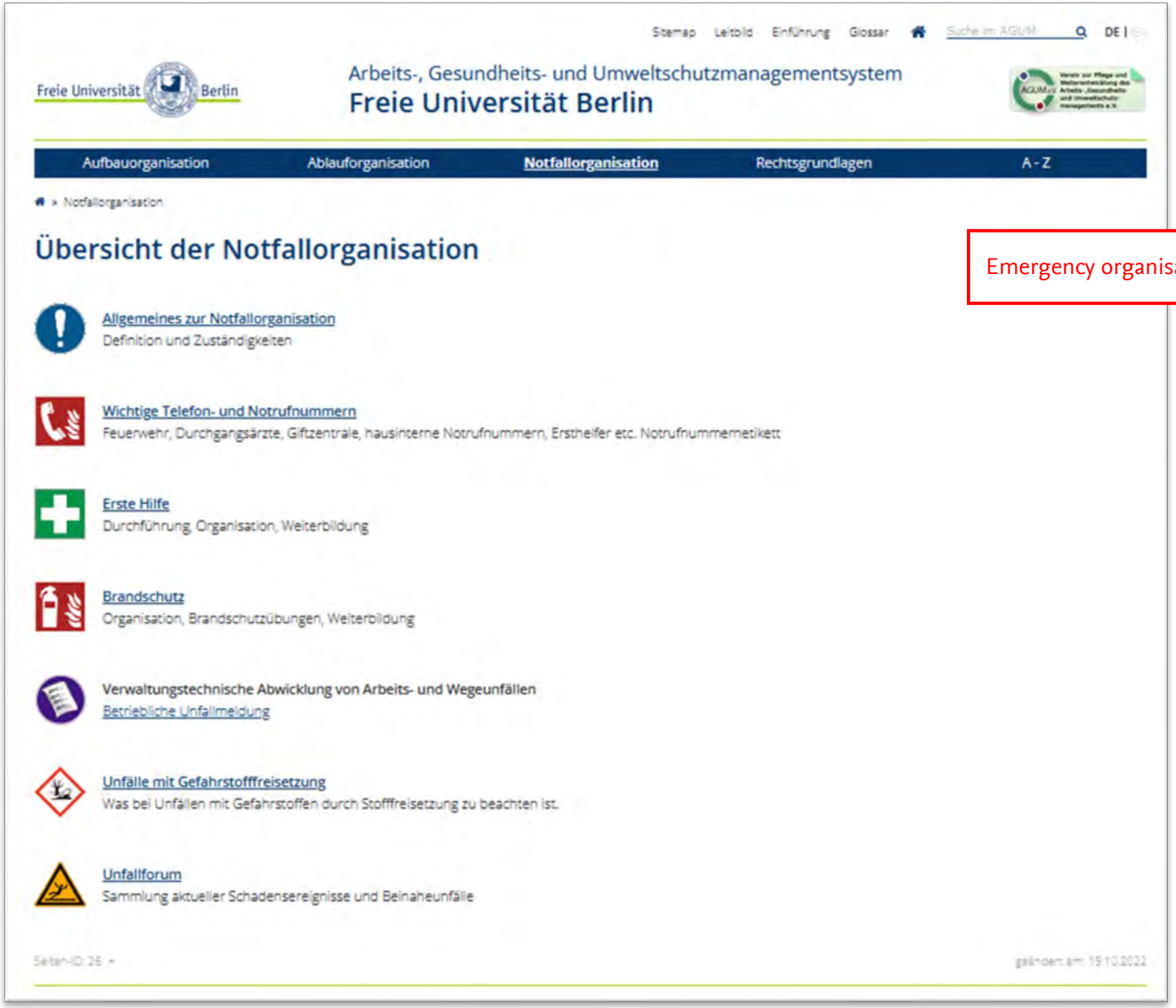
Druckversion

Procedures and processes at the School of Veterinary Medicine (overview)

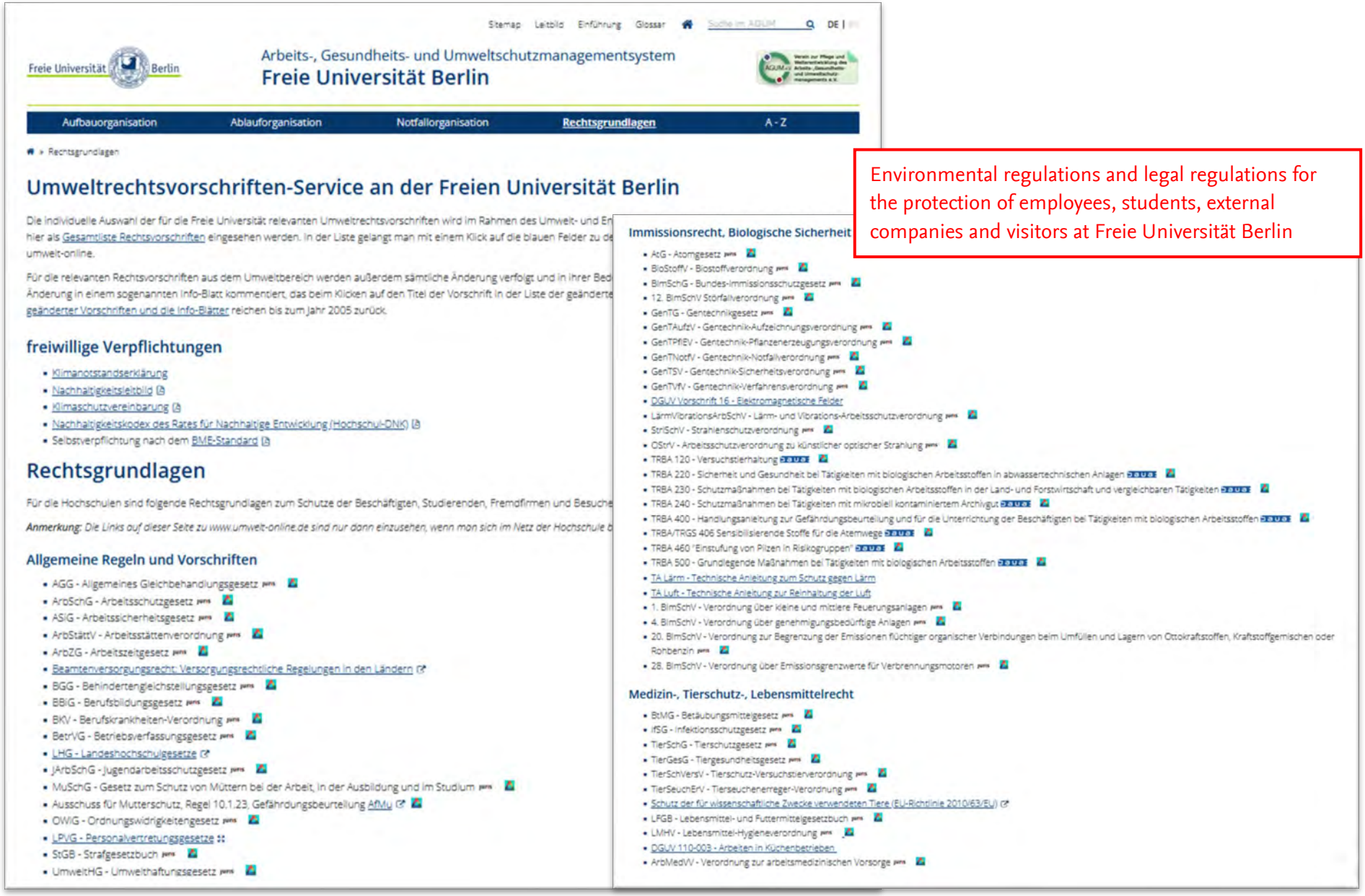




Example of a process description: "Experimental Research"



Emergency organisation (overview)



Sitemap Leitbild Einführung Glossar Suche im AGUM DE |

Freie Universität Berlin

Arbeits-, Gesundheits- und Umweltschutzmanagementsystem
Freie Universität Berlin

Aufbauorganisation | Ablauforganisation | Notfallorganisation | Rechtsgrundlagen | A-Z

» Rechtsgrundlagen

Umweltrechtsvorschriften-Service an der Freien Universität Berlin

Die individuelle Auswahl der für die Freie Universität relevanten Umweltrechtsvorschriften wird im Rahmen des Umwelt- und En
hier als Gesamtliste Rechtsvorschriften eingesehen werden. In der Liste gelangt man mit einem Klick auf die blauen Felder zu de
umwelt-online.

Für die relevanten Rechtsvorschriften aus dem Umweltbereich werden außerdem sämtliche Änderung verfolgt und in ihrer Bed
Änderung in einem sogenannten Info-Blatt kommentiert, das beim Klicken auf den Titel der Vorschrift in der Liste der geänderte
geänderter Vorschriften und die Info-Blätter reichen bis zum Jahr 2005 zurück.

freiwillige Verpflichtungen

- Klimanotstandserklärung
- Nachhaltigkeitsleitbild
- Klimaschutzvereinbarung
- Nachhaltigkeitskodex des Rates für Nachhaltige Entwicklung (Hochschul-DNK)
- Selbstverpflichtung nach dem BME-Standard

Rechtsgrundlagen

Für die Hochschulen sind folgende Rechtsgrundlagen zum Schutze der Beschäftigten, Studierenden, Fremdfirmen und Besuche

Anmerkung: Die Links auf dieser Seite zu www.umwelt-online.de sind nur dann einzusehen, wenn man sich im Netz der Hochschule b

Allgemeine Regeln und Vorschriften

- AGG - Allgemeines Gleichbehandlungsgesetz
- ArbSchG - Arbeitsschutzgesetz
- ASiG - Arbeitssicherheitsgesetz
- ArbStättV - Arbeitsstättenverordnung
- ArbZG - Arbeitszeitgesetz
- Beamtenversorgungsrecht: Versorgungsrechtliche Regelungen in den Ländern
- BGG - Behindertengleichstellungsgesetz
- BBiG - Berufsbildungsgesetz
- BKV - Berufskrankheiten-Verordnung
- BetrVG - Betriebsverfassungsgesetz
- LHG - Landeshochschulgesetze
- JArbSchG - Jugendarbeitsschutzgesetz
- MuSchG - Gesetz zum Schutz von Müttern bei der Arbeit, in der Ausbildung und im Studium
- Ausschuss für Mutterschutz, Regel 10.1.23, Gefährdungsbeurteilung AfMu
- OWiG - Ordnungswidrigkeitengesetz
- LPVG - Personalvertretungsgesetze
- StGB - Strafgesetzbuch
- UmweltHG - Umwelthaftungsgesetz

Immissionsrecht, Biologische Sicherheit

- AtG - Atomgesetz
- BioStoffV - Biostoffverordnung
- BImSchG - Bundes-Immissionsschutzgesetz
- 12. BImSchV Störfallverordnung
- GenTG - Gentechnikgesetz
- GenTAufzV - Gentechnik-Aufzeichnungsverordnung
- GenTPflEV - Gentechnik-Pflanzenerzeugungsverordnung
- GenTNotfV - Gentechnik-Notfallverordnung
- GenTSV - Gentechnik-Sicherheitsverordnung
- GenTVfV - Gentechnik-Verfahrensverordnung
- DGUV Vorschrift 16 - Elektromagnetische Felder
- LärmVibrationsArbSchV - Lärm- und Vibrations-Arbeitsschutzverordnung
- StrlSchV - Strahlenschutzverordnung
- OStrV - Arbeitsschutzverordnung zu künstlicher optischer Strahlung
- TRBA 120 - Versuchstierhaltung
- TRBA 220 - Sicherheit und Gesundheit bei Tätigkeiten mit biologischen Arbeitsstoffen in abwassertechnischen Anlagen
- TRBA 230 - Schutzmaßnahmen bei Tätigkeiten mit biologischen Arbeitsstoffen in der Land- und Forstwirtschaft und vergleichbaren Tätigkeiten
- TRBA 240 - Schutzmaßnahmen bei Tätigkeiten mit mikrobiell kontaminiertem Archivgut
- TRBA 400 - Handlungsanleitung zur Gefährdungsbeurteilung und für die Unterrichtung der Beschäftigten bei Tätigkeiten mit biologischen Arbeitsstoffen
- TRBA/TRGS 406 Sensibilisierende Stoffe für die Atemwege
- TRBA 460 "Einstufung von Pilzen in Risikogruppen"
- TRBA 500 - Grundlegende Maßnahmen bei Tätigkeiten mit biologischen Arbeitsstoffen
- TA Lärm - Technische Anleitung zum Schutz gegen Lärm
- TA Luft - Technische Anleitung zur Reinhaltung der Luft
- 1. BImSchV - Verordnung über kleine und mittlere Feuerungsanlagen
- 4. BImSchV - Verordnung über genehmigungsbedürftige Anlagen
- 20. BImSchV - Verordnung zur Begrenzung der Emissionen flüchtiger organischer Verbindungen beim Umfüllen und Lagern von Ottokraftstoffen, Kraftstoffgemischen oder Rohbenzin
- 28. BImSchV - Verordnung über Emissionsgrenzwerte für Verbrennungsmotoren

Medizin-, Tierschutz-, Lebensmittelrecht

- BtMG - Betäubungsmittelgesetz
- IfSG - Infektionsschutzgesetz
- TierSchG - Tierschutzgesetz
- TierGesG - Tiergesundheitsgesetz
- TierSchVersV - Tierschutz-Versuchstierverordnung
- TierSeuchErV - Tierseuchenerreger-Verordnung
- Schutz der für wissenschaftliche Zwecke verwendeten Tiere (EU-Richtlinie 2010/63/EU)
- LFGB - Lebensmittel- und Futtermittelgesetzbuch
- LMHV - Lebensmittel-Hygieneverordnung
- DGUV 110-003 - Arbeiten in Küchenbetrieben
- ArbMedVV - Verordnung zur arbeitsmedizinischen Vorsorge

Environmental regulations and legal regulations for the protection of employees, students, external companies and visitors at Freie Universität Berlin

AGUM Checklist for Institutes and Clinics of the VEE (translated example)

Sustainability & Energy department AGU management system umwelt@nachhaltigkeit.fu-berlin.de	Audit management Checklist for laboratories	Freie Universität Berlin

Information about institute xyz					✓
	Total	**<18 years**	**Severely disabled**		
Number of FU employees	26	0	1		
Number of students	1 student assistant 11 doctoral students				
Working language (please enter abbreviation de, en)		en			
Documentation language (occupational safety, hygiene, etc.)		de & en			
Accidents at work (please enter the number)	**2020**	**2021**	**2022**	**2023**	
Notifiable	-	1	-	-	
Other (entries in first-aid book/block)	4	2	-	-	
Environmental incidents (please enter the number)	**2020**	**2021**	**2022**	**2023**	
Notifiable (usually via legal office RA)	-	-	-	-	
Other (material, not reportable)	-	-	-	-	
Remarks / additions:					

If you have any questions, please contact	**umwelt@nachhaltigkeit.fu-berlin.de**

Occupational health and safety		✓
	Number in AG	
First aider (EH) >=10% trained, assigned, communicated?	3	
Fire safety assistants (BSH) >=10% trained, assigned, communicated?	2	
Safety Officer (SIB) 1 person trained, assigned, communicated?	1	
If you have any questions, please contact	**das@fu-berlin.de**	

Fire protection			✓
Fire safety regulations	Have all employees been instructed in the fire safety regulations?		✓
	Date of last instruction	26.01.2023	
Assembly point 	Labelling available?		✓
Escape routes 	Are the signposted escape routes accessible to the outside?		✓
	No wedged smoke and fire doors?		✓
	Employees instructed on specific escape routes in the building?		✓
Fire extinguisher 	Fire extinguisher ready for use (sealed)?		✓
	Safety labelling for fire extinguishers available?		✓
No fire loads (e.g. packaging that has not been disposed of, unnecessary furniture) in corridors and escape routes?			✓
Remarks / additions:			

Emergency organisation					✓
	Yes	No	Not recorded.	Need for clarification	
First aid kit					
Labelled location?					
Complete & up-to-date (best-before date observed)?					
First aid reporting block / first aid book available (process defined)?	✓				
Accident reporting / notification procedure known / instructed?	✓				
Emergency numbers					
"First aid poster" with local entries posted?					
Emergency numbers required/available for other hazards?	✓				
Employees instructed on telephone numbers?	✓				
Emergency management (fire, industrial accident)					
Do you know about the house alarm?					
Assistance for people with disabilities required and defined in the event of an evacuation alarm ?			✓		
Emergency evacuation drill carried out?	✓				
Emergency management (environmental incident)					
Are appliances connected to the central control room (-70°C freezer, etc.)?					
Is the registration form for the central control room up to date?	✓				
Environmental incident possible? (e.g. ventilation failure, leakage of chemicals)		✓			
Measures defined in the event of an incident?			✓		
Further PPE required and available for incident?			✓		
Further work equipment required for incident? (e.g. binding agent, sweeping broom)	✓				
Emergency drill carried out for possible incident?			✓		
Remarks / additions:					

If you have any questions, please contact	**das@fu-berlin.de / umwelt@nachhaltigkeit.fu-berlin.de**	✓
Personal(!) protective equipment (PPE) Wiki		
Protective clothing must be suitable for the activity and must specifications must be demonstrated / complied with. Checklist example		✓
Protective gloves must be suitable for the activity and demonstrate / comply with defined specifications (certification mark, number of the EN standard, area of use). Sample checklist, selection guide,		✓
Eye and face protection must be suitable for the activity and must specifications must be demonstrated/complied with. Sample checklist, instructions for use,		✓
Foot protection must be suitable for the activity and must must demonstrate / comply with defined specifications. Example checklist, instructions for use,		✓
Respiratory protection must be suitable for the activity and must must demonstrate / comply with defined specifications. Sample checklist, instructions for use		✓
Remarks / additions:		
Protective equipment available for the relevant work.		
If you have any questions, please contact	**das@fu-berlin.de**	

Hazardous substances, CLAKS	✓
Labelling of hazardous substances according to GHS implemented throughout? (Globally Harmonised System)	

CMR / KMR substances									✓
Please enter stock accordingly.	carcinogenic			mutagenic			toxic for reproduction		
	1A	1B	2	1A	1B	2	1A	1B	2
Number of substances (total)	6	12	10	1	1	8	12	18	12

Documentation	Yes	date	Not recorded.	Need for clarification
Risk assessment(s) created and implemented? AGUM	✓			✓
Operating instruction(s) created and put into force? AGUM	✓	02.11.2022		
Instruction content created and instructed? AGUM	✓			
Instruction documentation (list of participants) complete?	✓			
Substitute testing / substitution testing documented?	✓			
External labour companies are instructed and supervised?	✓			
Practical help for substitution testing→ SOPs				
Practical guide for activities involving carcinogenic substances				
GDA hazardous substance check as a practical aid				
When was the last complete CLAKS inventory?		Date:	consecutive	
If you have any questions, please contact	**das@fu-berlin.de**			

Work equipment of the AG / FB subject to mandatory inspection (not the responsibility of the TA)				✓
	Yes	date	Not recorded.	Need for clarification
Work equipment register with all work equipment subject to mandatory inspection available?	✓			
Risk assessment(s) created and implemented?			✓	
Operating instruction(s) created and put into force?			✓	
Instruction content created and instructed?			✓	
Instruction documentation (list of participants) complete?			✓	
If you have any questions, please contact	**das@fu-berlin.de**			

Changes to legal requirements / binding obligations					✓
	Yes	No	Not recorded.	Need for clarification	
Is there a **training overview** in which the TARGET is compared with the ACTUAL and measures are taken if necessary?		✓			
Do you receive the **environmental legislation service**?	✓				
What was the **last relevant change?** Please give an example.					
If you have any questions, please contact	**umwelt@nachhaltigkeit.fu-berlin.de**				

Company medical issues: Contact the company medical service

Occupational health care (ArbmedVV Annex)						✓
Reason for the provision	Wish	Offer	Compulsory	Suitability	Applicable?	
Screen activity		X			J	
Wet work 2-4 hours/day		X			J	
Wet work >4 hrs/day			X		N	
Exposure Hazardous substances*		X	(X)		J	
Pest control according to GefahrstoffV		X			N	
Exposure to other respiratory sensitisers / skin sensitisers		X			J	
Exposure to biological agents* R2 & R3 incl. genetic engineering work		X	(X)		J	
Exposure to sensitising / toxic biological agents		X			J	
Work in open spaces, forests, parks and gardens, zoos and animal parks			X		N	
Noise exposure		X	X		N	
Regular handling of heavy loads / incorrect loads		X			N	
Exposure to natural UV radiation of regularly >1h per day		X			N	
Wearing breathing apparatus group 1		X			N	
Wearing breathing apparatus group 2			X		N	
Stay abroad with particular climatic stress and/or risk of infection, in accordance with AMR 6.6.	X	X	X		N	
Handling radioactive substances, ionising radiation according to StrSchV				X	N	
Activities with risk of falling				X	N	
Driving, control and monitoring activities				X	N	
	Yes	Quantity	No	Need for clarification		
Have there been any work-related illnesses in the last 3 years?			✓			
	Yes	date	No	Need for clarification		
Instruction content on occupational medicine (e.g. preventive care) prepared and instructed?	✓	26.01.23				
Skin protection plan required / communicated? 	✓	06.09.21				
Glove plan required / communicated?	✓			In the hygiene plan		
GBU Maternity protection available for all activities?	✓			**(individual)**		
Remarks / additions						
If you have any questions, please contact	**betriebsarzt-fu@charite.de**					

Authorisations & associated commissions							✓
Duties transferred from the Executive Committee to the executive ?							
To: (name of manager) On: (date)	**Yes**						
GenTSV Authorisation No.	**Gene laboratory no. xyz (BSL 2)** **Gene laboratory no. xyz (BSL 3)**						
Biosafety level (SiS)	1	2 ✓	3 ✓	Biological Safety Officer (BBS) Name:	PD Dr n.n.		
Project Manager (PL):	Prof. Dr n.n.; Dr n.n.; Dr n.n, PhD (Gene laboratory no. xyz), Dr n.n (Gene laboratory no. xyz)						
BioStoffV Authorisation no.					Yes	No	
Protection level (SuS)	1	2 ✓	3 ✓	Targeted handling?	✓		
Risk group (RG)		✓	✓	Untargeted handling? Display LAGetSi for RG >2 takes place on:	✓		
Authorisation according to IfSG	Who: Prof. n.n Dr n.n			Place/date:			
Authorisation Animal Pathogens Ordinance	Who: Dr n.n			Place/date:			
Safety cabinet	Class I Protection of workers			Class II Protection of workers & work object	✓		
StrlSchG / StrlSchV Authorisation no.	No						
Radiation protection officer (SSB)	1.			2.			
Application Handling of radioactive substances, X-ray application (veterinary X-ray, technical X-ray)				Yes		No	✓
Non-ionising radiation (NIR)	Electric fields			Magnetic fields		Electromagnetic fields (EMF)	
Laser class (LK) Enter number of lasers	1	1M	2	2M	3R	3B	4
Laser Safety Officer (LSB) Name:	1. Closed laser, check whether required.			2.			
UV radiation (Warning sign for UV area)	UV-A 315-400 nm			UV-B 280-315 nm		UV-C 100-280 nm	
BtMG, narcotics traffic & veterinary in-house pharmacies, so-called responsible persons				Yes		No	✓
GÜG, transport of raw materials, so-called responsible agents				Yes		No	✓
Do you have any other authorisations? Please name these in a comparable way to the information above.							
Remarks / additions:							

If you have any questions, please contact	**umwelt@nachhaltigkeit.fu-berlin.de**

Energy efficiency (electricity & heat)		✓
Goal: Minimise demand, knowledge and knowledge transfer		
Economical use with energy	Are all active employees informed about the goal of using energy sparingly (e.g. as part of the annual briefing or through notices) and referred to sources of energy-saving tips at the FU? (file storage, FU website and/or external websites)	✓
Working hours 	Are the office working hours limited and communicated to the TA's building management system and the energy-related tasks for the first and last employee in the daily routine defined (ventilation day/night, heating day/night, lights on/off)?	N
Quality assurance and occupational safety	Is office work restricted (no lone working) for quality assurance, to ensure occupational safety and to save energy?	N
Savings ideas	Are savings ideas from employees received, forwarded, checked, answered and, if necessary, implemented in a defined way?	✓
Economical use of energy		✓
Electrical appliances 	Is the energy-efficient use of appliances checked regularly (e.g. annually)? E.g. good utilisation & efficient settings during operation, avoidance of continuous consumption or standby consumption by switching off & power strips, checking and, if necessary, replacing inefficient old appliances and light sources	?
Heating 	Is the energy-efficient use of heating energy checked regularly (e.g. annually)? Radiators not blocked, no fan heaters, leaking windows reported, no overheated rooms (e.g. due to defective thermostatic valves).	✓
Cooling / air conditioning 	Can the set temperature be increased in summer? Can the running time be reduced? (e.g. without night & weekend operation)?	✓
Use of compressed air	Is the energy-efficient use of compressed air checked regularly (e.g. annually)? Is the utilisation still in good proportion to the compressed air supply? No audible leaks (hissing noises)? Pressure reduced as far as possible? Compressed air consumption minimised in everyday use through instruction (e.g. no use for cleaning/drying)?	N
Remarks / additions:		

If you have any questions, please contact	d.tengg-kobligk@fu-berlin.de

Industrial hygiene, tidiness and cleanliness					✓
	Yes	No	Not recorded.	Need for clarification	
Are floor surfaces freely accessible for cleaning in corridors, kitchens and offices? (not littered / no fire hazards)	✓				
Are gaps in rooms, areas on cupboards etc. in corridors, kitchens and offices free? (not littered / no fire loads)	✓				

Regular waste disposal, property management					✓
Waste separation system established?	Hallway	Kitchen	Office	Laboratory	
Cleaning frequency per week (as a rule)	3-5	5	1	1	
Blue bin: Paper & cardboard *Unique: HAN 1834-14 wastepaper bin, capacity: 30 litres, blue*					✓
Yellow / orange bins: packaging, recyclables *Unique: HAN 1834 wastepaper bin, capacity: 30 litres, yellow, 6 pieces*					✓
Black / grey bins: Residual waste *Wastepaper bin HAN 1834-13, capacity: 30 litres, black*					✓
Green bins: waste glass (green, brown, white with sticker) *Unique: HAN Grip 18190 wastepaper bin, capacity: 18 litres, green* Or even better, collect them directly in cardboard boxes and take them to the bottle bank.					N
Brown bins: organic waste (only available in exceptional cases) *Unique: pedal bin recommended*					N
Collection & disposal of biohazardous substances				AG responsible	✓
Collection & disposal of radioactive materials				AG responsible	N
Stickers for labelling waste bins for waste separation can be obtained free of charge from Sonderentsorgung@FU-Berlin.de .					
Remarks / additions:					

If you have any questions, please contact	**FB VL or dienstleistung@zuv.fu-berlin.de**	
Special disposal		✓
How is the disposal of old files & data protection material organised?	About special disposal: Safety containers from Veolia	✓
How is the return of used batteries / rechargeable batteries organised?	Collection containers, emptying FB-internal	✓
How is e-waste take-back organised?	RvO collection dates, collection FB-internal	✓
How is scrap metal collection organised?	RvO collection dates, collection FB-internal	✓
How is the handling of full/empty toner cartridges organised?	Storage of full cartridges in the copy room, disposal of empty cartridges internally at FB	✓
Have you already been able to use the FUndgrube?	Yes	✓
If you have any questions, please contact	**sonderentsorgung@fu-berlin.de**	

Appendix to 5.1.2.: Examples and detailed description of non-clinical animal work

Non-clinical animal work is primarily taught and practiced in the subjects related to Anatomy, Physiology, Pathology, Animal Welfare and Laboratory Animal Science. Examples are:

- **Anatomy:** Small groups with up to 6 students. Each group begins by dissecting a dog or cat. During in-situ demonstration on carcasses and with live animals, the anatomy of the body cavities is demonstrated. In comparative anatomy students are taught the differences between relevant species using carcasses, body parts and live animals. Part of anatomy teaching is integrated into the organ-centered module lectures.

- **Pathological-anatomical demonstrations:** Small groups of up to 8 people each. Students observe, describe and discuss pathological findings by means of materials used in the routine operations of the institute and plastinates, and learn how to produce pathological-anatomical diagnoses - including differential diagnoses. During the clinical rotation, students work in regular pathology operations for two weeks. Under the supervision of assistant doctors, small groups of two students each work on and discuss cases that they shall present to pathologists in the afternoon meeting. The practical post-mortem examination takes place on the last day. To this end, every student on rotation shall carry out a post-mortem examination on an animal and write a post-mortem examination report.

- **Animal welfare seminar**: In cooperation with official veterinarians, current case studies shall be dealt with. In the animal welfare seminar, students are provided with 11 current animal welfare cases from the areas (euthanasia of pets, aggressive dogs, circus, urban pigeons, killing in the event of an epidemic, slaughter of pregnant cattle, veterinary office processing of animal welfare cases and errors in case processing, neglected cattle husbandry, goat with poor general condition, mare blood farms, pig) to work on. All cases are worked on in groups and one group at a time presents one case as a presentation; written papers are prepared for the other cases. The cases are presented in a total of 5 classroom sessions and discussed with the students together with official veterinarians and specialist colleagues. Regular attendance and submission of all case work is required for passing the seminar.

- **Laboratory animal science:** An elective compulsory course - supplementary to the theoretical foundations from the lecture. Practical knowledge of the following shall be imparted: knowledge pertaining to the most frequently used animal species in laboratory experiments - namely rats and mice, practical exercises in the handling, housing, identification and transport of animals, application and sampling techniques, assessment of behaviour patterns as an indication of animal well-being (and potential suffering) and in humanely destroying laboratory animals according to relevant animal welfare regulations. For every two students, there is one mouse and one rat for use. Together with the theoretical foundations from the lecture and the practical exercises from the elective compulsory course for laboratory animal science, students acquire a proof of expertise so that they are able to collaborate in scientific projects on laboratory animals. In an advanced course, skills pertaining to FELAS B recommendations (Federation of European Laboratory Animal Science - Category B course), including hygiene concepts, laboratory animal handling measures as well as experiment planning and application procedures shall be imparted. The courses were restructured in a modular way according to the EU framework programme and an additional course for farm animals in laboratory animal science was established together with the FLI and LANiV (https://www.laniv.de/download.html).

- **Physiology:** In the mandatory exercises in physiology, students run in small groups through topic-relevant practical exercises on animals such as testing reflexes, examining eyes, recording electrocardiograms, heart rates, blood pressure, respiratory resistance and blood oxygenation. They further practice animal calorimetry, forestomach exploration and recording of ruminal motility, as well as diverse laboratory tests on blood and ruminal fluid samples.

Appendix to 5.1.3.: Code of Ethics from Students for Students of the School of Veterinary Medicine at Freie Universität Berlin (Extended Abstract)

Code of Ethics from Students for Students of the School of Veterinary Medicine at Freie Universität Berlin (Extended Abstract)

Christa Thöne-Reineke[1], PD Dr. Lola Fischer-Tenhagen[2], Dr. Susann Langforth[3], Prof. Dr. Diana Meemken[3]
[1] Institute of Animal Welfare, Animal Behavior and Laboratory Animal Science, School of Veterinary Medicine, Freie Universität Berlin, Germany
[2]German Federal Institute for Risk Assessment, Department Experimental Toxicology and ZEBET, Berlin, Germany
[3] Institute of Food Safety and Food Hygiene, Working Group Meat Hygiene, School of Veterinary Medicine, Freie Universität Berlin, Germany

The different roles of animals as pets or economic livestock makes ethical considerations absolutely necessary. Veterinarians have a particular position when it comes to animals. With their pronounced expertise and work on the one hand in the service of the animals, but also for humans they often must deal with ethical issues. For this reason, the veterinary community in Germany has already drawn up code of ethics. Firstly, the Code of Ethics of Veterinarians in Germany of the German Veterinary Medical Association and, secondly, the recommendations for the implementation of the "Code of Ethics of Veterinarians in Germany" (https://www.bundestieraerztekammer.de/btk/ethik/). As these codes primarily address veterinarians and students have similar but differing needs, an interactive and interdisciplinary code of ethics was developed by students for students of veterinary medicine at Freie Universität Berlin. This was done as part of an elective course in which students of all years could participate. The above-mentioned codes of ethics served as a template.

The final code of ethics by students for students of veterinary medicine at Freie Universität Berlin consists of three parts:

A general part with an ethic statement of ten subpoint. In addition to the simple form it was incorporated into the interactive teaching and learning platform tet.folio for intra-university teaching with case studies and was made available to students in online phases, together with a form for reporting suspected cases of animal welfare violations. The Institute for Animal Welfare, Animal Behavior and Laboratory Animal Science with its animal welfare officers is available as a contact.

Secondly, a decision tree for practice and farm visits was developed to guide students in cases of suspicion and to indicate a standardized and appropriate response.

Thirdly, a flyer with information relevant to animal welfare was developed in the context of non-university teaching and in preparation for the abattoir internship. Animal welfare-relevant incidents at the abattoir were prepared in tet.folio using case studies, which are made available to students in online phases in preparation for the abattoir internship. In addition, a reporting form for suspected cases was developed for the abattoir practical course; the working group meat hygiene of the Institute of Food Safety and Food Hygiene is available as a contact here.

The strong commitment of the students in this elective course should be particularly emphasized, as it has contributed considerably to the success of this code of ethics by students for students.

Appendix to Table 5.1.1.: Number of specimens used in practical anatomical training

Species	Academic year 2020/21										
	cadavers	material of animal origin	specimens (fixed)	specimens (bones)	others						
					anatomical wax models	plastinates	slice plastinates	corrosion specimens	anatomical models	X-ray-/ CT-images	e-Learning
Cattle	6	(40)	700	550	47	65	36	7	15	0	E-Lectures E-Courses PlastinaTrainer
Small ruminants		(31)									
Companion animals	109	128	1400	800	83	142	192	19	25	87	Canis-Praep & Cat dissection PlastinaTrainer
Equine	4	86	750	500	39	85	86	13	10	25	E-Lectures E-Courses PlastinaTrainer
Pigs	4	16	250	304	67	47	29	0	1	0	E-Lectures E-Courses PlastinaTrainer
Poultry & rabbits (incl. rodents)	76	34				24	18	4	0	0	E-Lectures E-Courses PlastinaTrainer
Exotic pets	0	0	0	0	0	42	3	0	0	0	
Others (seals, fish, humans)	0	0	0	0	0	0	0	4	43	0	

In () parts of the animal (for example: heads, distal limbs, organs) from slaughterhouses, butchers, etc.

Species	Academic year 2021/22										
	cadavers	material of animal origin	specimens (fixed)	specimens (bones)	others						
					anatomical wax models	plastinates	slice plastinates	corrosion specimens	anatomical models	X-ray-/ CT-images	e-Learning
Cattle	9	56	700	550	47	68	36	7	15	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Small ruminants		36									
Companion animals	123	128	1400	800	83	157	192	19	25	87	Canis-Praep & Cat dissection PlastinaTrainer 3D scans
Equine	5	107	750	500	39	89	86	13	10	25	E-Lectures E-Courses PlastinaTrainer 3D scans
Pigs	6	32	250	304	67	52	29	0	1	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Poultry & rabbits (incl. rodents)	140	45				35	18	4	0	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Exotic pets	0		0	0	0	42	3	0	0	0	
Others (seals, fish, humans)	0		0	0	0	0	0	4	43	0	

In () parts of the animal (for example: heads, distal limbs, organs) from slaughterhouses, butchers, etc.

Species	Academic year 2022/23										
	cadavers	material of animal origin	specimens (fixed)	specimens (bones)	others						
					collection	anatomical wax models	slice plastinates	corrosion specimens	anatomical models	X-ray-/ CT-images	e-Learning
Cattle	7	40	700	550	47	73	36	7	15	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Small ruminants		20									
Companion animals	120	128	1400	800	83	165	192	19	25	87	Canis-Praep & Cat dissection PlastinaTrainer 3D scans
Equine	5	120	750	500	39	95	86	13	10	25	E-Lectures E-Courses PlastinaTrainer 3D scans
Pigs	6	36	250	304	67	58	29	0	1	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Poultry & rabbits (incl. rodents)	140	42				40	18	4	0	0	E-Lectures E-Courses PlastinaTrainer 3D scans
Exotic pets			0	0	0	42	3	0	0	0	
Others (seals, fish, humans)			0	0	0	0	0	4	43	0	

In () parts of the animal (for example: heads, distal limbs, organs) from slaughterhouses, butchers, etc.

Appendix to 6.1.1.: List of charge-free software packages for staff and students

Charge-free software packages for staff and students
Microsoft Office Packages
Adobe Acrobat
Affinity
Camtasia und Snagit
Cisco AnyConnect Secure Mobility Client
Cisco Jabber (Instant Messaging)
Citavi Team
EndNote
JMP statistics
Mathworks MATLAB
MAXQDA
Mestrenova
oXygen XML Editor
Stata
think-cell
SimNerve
SimMuscle
SimHeart
SimNeuron
SimVessel

Appendix to 6.2.1. and 6.3.: Details on library structure, funding and resources

Staff (FTE) and qualifications		
Position	**Qualifications**	**FTE**
Director of the Library	Doctorate in Veterinary Medicine; specialist veterinarian for meat hygiene; Master of Arts in Library and Information Science (MA LIS)	1
Libarian	Specialist in media and information services; Bachelor in Library and Information Science, specialising in library management; Assistant	5.5
Library IT division	Computer scientist with Bachelor degree	1
Total (FTE)		**7.50**

Opening hours and days	
Mo-Fr	8 am to 6 pm
Sat-Sun	Closed

Annual budget /Area of expenditure	Euro
Media	ca. 150,000
Budget	15,000

Facility	
Location on the campus	Centre of the Düppel Campus (Building 6)
Total area	Approx. 3,000 m^2
Number of rooms	1 large, two-story library hall, 2 separate teaching rooms, 1 seminar room, 1 parent-child room
Number of seats	90 individual workings spaces
Number of computers	10 in the PC pool
Number of connection points for portable PCs	Laptops and mobile devices have access to Eduroam. There is no shortage of power supply points
Available bibliographical software	Endnote (free download via Zedatportal) Citavi (free download via Zedatportal)
Available bibliographical databases	CAB (free via Eduroam and vpn) FSTA (free via Eduroam and vpn) Web of Science (free via Eduroam and vpn)

Number of veterinary books and periodicals (Veterinary Library)	
Monographs, journals / periodicals, University publications	174,000
– Of which are university publications	44,146
– Of which are journals / periodicals	3,076

Number of veterinary e-books and e-periodicals (Veterinary Library)[2]	
The School of Veterinary Medicine	Approx. 1,000

Number of other (e)books and (e)periodicals[3]	
Media type	**Title**
Monographs (print)	Approx. 4,000,000
E-book collections	74
E-books (single titles)	Approx. 1,700,000
Journals (print, current reference)	Approx. 10,000
Journals (online, current reference)	Approx. 60,000 (approx. 14,000 in life sciences)
Databases	1,600

[2] Only managed by the Veterinary Library and / or funded licenses
[3] The figures refer to the total stock of all libraries of Freie Universität Berlin. All libraries in the library system are available for members of university to use.

Appendix to 6.3.a.: Overview of learning stations, online material and simulators/materials used in the courses in anaesthesia, surgery and Emergency Veterinary Care (EVC)

Block week, Semester 9, Emergency Veterinary Care

Department	Learning Station	Substation	Content	Online Material	Simulators/materials used
Small Animal Clinic	„Hit By Car“ (HBC)	1	CPR, blood pressure	Tetfolio, Case Nr. 1: „Hit By Car“	CPR Dummies (Rescue Critters)
		2	Venous catheter & injection techniques	Tetfolio, Case Nr. 1: „Hit By Car“ – specifically video material for mentioned clinical skills	Canine venipuncture models (Erler Zimmer) + Canine venipuncture pads (in-house manufactring)
		3	Fluid therapy & analgesia (dog & cat)	Virtual pharmacy	Drip, infusion pump
		4	Sonography (FAST approach)	Tetfolio, Case Nr. 1: „Hit By Car“ – specifically video material for mentioned clinical skills	Ultrasound/cadavers
	Dyspnea	1	Oxygen cannula & intubation	Tetfolio, Case Nr. 2: „Dyspnea cat“, specifically video material for mentioned clinical skills	CPR Dummies (Rescue Critters) Oxygen cannula skull model
		2	Thoracocentesis, chest drains	Tetfolio, Case Nr. 2: „Dyspnea cat“, specifically video material for mentioned clinical skills	Cadavers + Thorax model (in-house manufacturing)
		3	Chest x-rays & punctate analysis	Tetfolio, Case Nr. 2: „Dyspnea cat“, specifically x-ray material as examples	Chest x-rays and samples
		4	Electrocardiography (dog & cat)	Tetfolio, Case Nr. 2: „Dyspnea cat“,	CPR dummies (Rescue Critters)
	Dystocia (bitch)	1	Diagnosing dystocia in the bitch	Tetfolio, Case Nr. 8: „Dystocia in the bitch“, specifically interactive	Ultrasound machine

				material for learning how the M-mode works	
		2	Fetal extraction 1	Tetfolio, Case Nr. 8: „Dystocia in the bitch“, specifically video material for mentioned clinical skills	Canine birthing simulator „Gyndog“ (Vetiqo) x 2 + Puppy simulators (Vetiqo) x 6
		3	Fetal extraction 2	Tetfolio, Case Nr. 8: „Dystocia in the bitch“, specifically video material for mentioned clinical skills	Canine birthing simulator „Gyndog“ (Vetiqo) x 2 + Puppy simulators (Vetiqo) x 6
		4	Puppy dystocia and neonatology	Tetfolio, Case Nr. 8: „Dystocia in the bitch“, specifically video material for mentioned clinical skills	Puppy simulators (Vetiqo) x 6
	FLUTD (cat)	1	Urethral catheter	Tetfolio, Case Nr. 9: „Anuria ind a cat “, specifically video material for mentioned clinical skills	Catheter model (HolSim) + Catheter model (in-house manufacturing) x 3
		2	Ultrasound-guided cystocentesis	Tetfolio, Case Nr. 9: „Anuria ind a cat “, specifically video material for mentioned clinical skills	Cadavers + Cystocentesis model (in-house manufacturing) x 2
		3	Urine sample analysis	Tetfolio, Case Nr. 9: „Anuria in a cat “, specifically video material for mentioned clinical skills	Refractometer + Microscope
		4	Urine sediment quiz	Quiz	Quiz
Equine Clinic	Colic (horse)	1	Transrectal palpation of the GIT	Tetfolio, Case Nr. 3: „Clolic horse“, specifically video material for mentioned clinical skills	Equine simulator (VSI)
		2	Nasogastric tubing	Tetfolio, Case Nr. 3: „Clolic horse“, specifically video	Tubing model (South Africa)

				material for mentioned clinical skills	
		3	Venous catheter & fluid therapy (horse)	Tetfolio, Case Nr. 3: „Clolic horse“, specifically video material for mentioned clinical skills	Equine simulator (VSI)
		4	Abdominocentesis and punctate analsyis	Tetfolio, Case Nr. 3: „Clolic horse“, specifically video material for mentioned clinical skills	Equine simulator (VSI) + in-house manufactured model
	Acute Lameness (horse)	1	Anatomical structures in the distal limb	Tetfolio, Case Nr. 3: „Acute lameness“, specifically video material for mentioned clinical skills	Cadaver legs
		2	Nerve blocks (distal limb)	Tetfolio, Case Nr. 3: „Acute lameness“, specifically video material for mentioned clinical skills	Cadaver legs
		3	Draining an abscess	Tetfolio, Case Nr. 3: „Acute lameness“, specifically video material for mentioned clinical skills	Cadaver legs
		4	Hoof bandages	Tetfolio, Case Nr. 3: „Acute lameness“, specifically video material for mentioned clinical skills	Cadaver legs
	Wound management (horse)	1	Synovial sampling	Tetfolio, Case Nr. 3: „Wound management“, specifically video material for mentioned clinical skills	Cadaver legs
		2	Wound management	Tetfolio, Case Nr. 3: „Wound management“, specifically video material for mentioned clinical skills	Cadaver legs

		3	Suture techniques 1	Tetfolio, Case Nr. 3: „Wound management“, specifically video material and SOPs for sutures	Cadaver legs
		4	Suture techniques 2	Tetfolio, Case Nr. 3: „Wound management“, specifically video material and SOPs for sutures	Cadaver legs
	Peripartal emergencies in the horse	1	Flushing the uterus	Tetfolio, Case Nr. 12: peripartal diseases in the mare, specifically video material for mentioned clinical skills	Uterine flushing model (in-house manufacturing) – in progress
		2	Oxytocin drip	Tetfolio, Case Nr. 12: peripartal diseases in the mare, specifically virtual pharmacy	Equine simulator (VSI)
		3	Red Bag in horses	Tetfolio, Case Nr. 12: peripartal diseases in the mare, specifically images from clinical cases	Red bag model (in-house manufacturing) – in progress
		4	Initial care of the neonatal foal	Tetfolio, Case Nr. 12: peripartal diseases in the mare, specifically video material for mentioned clinical skills	Adapted calf model (VSI)
Clinic for ruminants & swine	Epidemiologically relevant disease outbreak	1	Handling & sampling of chickens	Tetfolio, Case Nr. 5: „Disease outbreak“, specifically video material for mentioned clinical skills	Chicken models (in-house manufacturing) x 2
		2	Sampling pigs	Tetfolio, Case Nr. 5: „Disease outbreak“, specifically video material for mentioned clinical skills	Piglet & weaned pig models (Vetiqo) x 2

		3	Sample processing	Tetfolio, Case Nr. 5: „Disease outbreak“, specifically video material for mentioned clinical skills	Packaging materials
		4	Culling (Cattle, Pigs, Poultry)	Tetfolio, Case Nr. 5: „Disease outbreak“, specifically video material for mentioned clinical skills	Chicken models (in-house manufacturing) x 2 Turkey head models (in-house manufacturing) x 3 Weaned pig models (Vetiqo) x 2
	Recumbent cow	1	Restraint	Tetfolio, Case Nr. 6: „Recumbent cow“, specifically video material for mentioned clinical skills	Bovine model (Reality Works) x 1 Lifesize cow model x 1
		2	Venous catheter & fluid therapy (cow)	Tetfolio, Case Nr. 6: „Recumbent cow“, specifically video material for mentioned clinical skills	Venipuncture pads (in-house manufacturing) x 4 Fluid therapy boxes (in-house manufacturing) x 4
		3	Oral medication/prophylaxis	Tetfolio, Case Nr. 6: „Recumbent cow“, specifically video material for mentioned clinical skills & virtual pharmacy	Nasogastric tubing/Bolus insertion model (bovine) (in-house manufacturing) x 1
		4	Injection techniques	Tetfolio, Case Nr. 6: „Recumbent cow“, specifically video material for mentioned clinical skills	Injection pads (in-house manufacturing) x 4 Calf model „Molly“ (in-house manufacturing) x 1
	Dystocia cow	1	Presentation, position, posture	Tetfolio, Case Nr. 7: “Cow in labor”, specifically video material for mentioned clinical skills	Obstetrical examination simulators (in-house manufacturing) Calf simulator (Veterinary Simulator Industries)
		2	Obstetrical equipment	Tetfolio, Case Nr. 7: “Cow in labor”, specifically video	Obstetrical examination simulators (in-house manufacturing)

				material for mentioned clinical skills	Obstetrical equipment
		3	Casting & fetal extraction	Tetfolio, Case Nr. 7: “Cow in labor”, specifically video material for mentioned clinical skills	Standing bovine simulator (in-house manufacturing) Fetal extraction simulator (in-house manufacturing)
		4	Initial care of the neonatal calf	Tetfolio, Case Nr. 7: “Cow in labor”, specifically video material for mentioned clinical skills	Calf model (Veterinary Simulator Industries)
	Calf presenting with distended abdomen	1	Nasogastric tubing (calf)	Tetfolio, Case Nr. 13: “Calf with a distended abdomen”, specifically video material for mentioned clinical skills	Calf model (in-house manufacturing)
		2	Trocarization of the rumen	Tetfolio, Case Nr. 13: “Calf with a distended abdomen”, specifically video material for mentioned clinical skills	Calf model (in-house manufacturing)
		3	Intravenous fluid therapy (calf, ear)	Tetfolio, Case Nr. 13: “Calf with a distended abdomen”, specifically video material for mentioned clinical skills & virtual pharmacy	Calf ear models (in-house manufacturing)
	Uterine prolapse	1	Epidural anesthesia (ruminants)	Tetfolio, Case Nr. 15: “Sheep with uterine prolapse”, specifically video material for mentioned clinical skills & virtual pharmacy	Epidural model (in-house manufacturing)
		2	Reposition of the uterus	Tetfolio, Case Nr. 15: “Sheep with uterine prolapse”, specifically video material for mentioned clinical skills & virtual pharmacy	Uterus model (sheep, in-house manufacturing)

		3	Vaginal sutures 1 & 2	Tetfolio, Case Nr. 15: "Sheep with uterine prolapse", specifically video material for mentioned clinical skills	Vagina models (in-house manufacturing)
		4	Vaginal sutures 3 & 4	Tetfolio, Case Nr. 15: "Sheep with uterine prolapse", specifically video material for mentioned clinical skills	Vagina models (in-house manufacturing)
Institute of pharmacology	Intoxication	1	Gastric irrigation (dog)	Tetfolio, Case Nr. 16: "Chocolate poisoning in a dog"	Gastric irrigation model (in-house manufacturing)
		2	Documentation of administered medication in farm animals	Tetfolio, Case Nr. 16: "Rhododendron poisoning in a goat"	Package inserts, documentation forms
		3	Field infusion vs. Long-term catheter placement (horse)	Tetfolio, Case Nr. 16: "Sycamore poisoning in a goat"	Venipuncture pads
		4	Recognition and differentiation between harmful and harmless plants	Herbarium	Plant materials
Department of	Ophthalmological emergencies	1	Corneal defect	Tetfolio, Case Nr. 14: "Trauma to the eye"	In progress
		2	Sonographic examination of the eye	Tetfolio, Case Nr. 14: "Trauma to the eye"	
		3	Eyelid sutures (horse)	Tetfolio, Case Nr. 14: "Trauma to the eye"	
		4	Eyelid sutures (dog)	Tetfolio, Case Nr. 14: "Trauma to the eye"	
Small animal clinic, equine clinic, clinic for ruminants & swine	Relevant laboratory methods	1	Hematology (dog, cow, horse)	In progress	
		2	Urine analysis		
		3	Punctate analysis		
		4	Cowside tests		

Block week, Semester 5: "Surgery"

Department	Learning Station	Online Material	Simulators used
Small animal clinic	Introduction to bandaging (dog & cat)	Video material + standard operating procedures (delivered using tetfolio.de)	CPR dummies (2), auscultation dummies (2) + cadavers
	Surgical knots & ties		Knot tying boards (in-house manufacturing) (20) Suture pads (in-house manufacturing) (20)
	Introduction to wound management (dog)		Wound management models (2) Cadavers
Equine clinic	Bandaging of the hoof and distal limb	Video material + standard operating procedures (delivered using tetfolio.de)	Equine simulator (Veterinary Simulator Industries) (1) Model horse with in-house adaptations (1) Equine limbs (10)
	Preparation for surgery (gowning, gloving, scrubbing, draping)		Draping models (in-house manufacturing) (4) Surgical scrub models (in-house manufacturing) (6) Surgical clothing
Clinic for ruminants and swine	Surgical instruments, sterile technique	Video material + standard operating procedures (delivered using tetfolio.de)	Surgical instruments
	Suture techniques		Suture pads (in-house manufacturing) (20)

Block week, Semester 7: "Anesthesia & Intensive Care"

Department	Learning Station	Online Material	Simulators used
Small animal clinic	Intubation (dog & cat)	Video material + standard operating procedures (delivered using tetfolio.de)	SynDaver intubation model (1) + Cadavers
	Emergency ultrasound (dog & cat)		Easote Mylab Ultrasound machine (3) + Cadavers
	CPR (dog &cat)		CPR dummies (2) Chest compression models (in-house manufacturing) (6)
	Monitoring anesthesia (dog & cat)		Simulated anesthesia scenarios
Equine clinic	Pain management (horse) & fluid therapy	Video material + standard operating procedures (delivered using tetfolio.de)	Package inserts for different medication Drip Equine simulator (Veterinary Simulator Industries) (1)
	ECG (horse)		Model horse with in-house adaptations (1) ECG samples
	Emergency incidents during anesthesia		Simulated anesthesia scenarios
Clinic for ruminants and swine	Retrograde intravenous local anesthesia of the bovine foot	Video material + standard operating procedures (delivered using tetfolio.de)	Cadavers (10)
	Local anesthesia of the bovine flank (in progress)		Flank anesthesia model (in-house manufacturing) (1)
Leibniz Institute for Zoo and Wildlife Research	Chemical immobilization of cattle and wildlife	Video lecture	Outdoor target practice

Appendix to 6.3.b.: Veterinary Skills Net – learning stations and simulators in use in 2024

General Skills (not species-specific)						
Learning Station				Materials	Manufacturer	Number
A1	**Surgical preparation**	A1.1.	Surgical clothing: masks & caps	Surgical clothing	Miscellaneous	Differs
		A1.2.	Surgical hand prep: Washing	UV-lamps	Braun	5
		A1.3.	Surgical hand prep: Disinfection	Disinfectant	Miscellaneous	Differs
		A1.4.A	Gowning	Surgical clothing	Miscellaneous	Differs
		A1.4.B	Gloving (with gown)	Surgical clothing	Miscellaneous	Differs
		A1.4.C	Gloving (without gown)	Surgical clothing	Miscellaneous	Differs
		A1.5.	Handling of surgical instruments	Surgical instruments (sterile)	Miscellaneous	Differs
		A1.6.A	Pre-op: Prepping the patient for surgery (check-list)	None	n/a	n/a
		A1.6.B	Pre-op: Induction of anesthesia and positioning of the patient	None	n/a	n/a
		A1.6.C	Pre-op: Surgical site preparation (non-sterile)	None	n/a	n/a
		A1.6.D	Pre-op: Surgical site scrub (sterile)	Scrub models	In-house manufacture	6
		A1.6.E	Pre-op: surgical draping	Drape models	In-house manufacture	5
		A1.7.	Surgical instruments (collection)	Surigical instrument collection	Miscellaneous	3
A2	**Surgical skills 1 (knots and interrupted sutures)**	A2.1.	Surgical knot: two-hand-tie	Knot tying board	In-house manufacture	20
		A2.2.	Surgical knot: one-hand-tie	Knot tying board		
		A2.3.	Surgical knot: instrument-tie	Knot tying board/suture pad		
		A2.4.	Slipknot	Suture pad + suture materials	In-house manufacture	Differs (20 – 60)

		A2.5.	Millers Knot	Suture pad + suture materials		
		A2.6.	Aberdeen Knot	Suture pad + suture materials		
		A2.7.	Simple vessel ligation	Suture pad + suture materials		
		A2.8.	Figure of 8 vessel ligation	Suture pad + suture materials		
		A2.9.	Skin staples	Suture pad + suture materials		
		A2.10.	Simple interrupted sutures	Suture pad + suture materials		
		A2.11.	Vertical mattress suture (Donati)	Suture pad + suture materials		
		A2.12.	Single horizontal mattress stitch (U)	Suture pad + suture materials		
		A2.13	Crossstitch	Suture pad + suture materials		
A3	**Surgical skills 2 (continuous sutures)**	A2.14.	Modified vertical mattress suture	Suture pad + suture materials		
		A2.15.	Continuous horizontal mattress suture	Suture pad + suture materials		
		A2.16.	Horizontal mattress suture with stent	Suture pad + suture materials		
		A3.1.	Mesh technique	Model „Wound revision“		
		A3.2.	Cushing suture	Suture pad + suture materials		
		A3.4.	Simple continuous suture	Suture pad + suture materials		
		A3.5.	Subcutaneous suture	Suture pad + suture materials		
		A3.6.	Reverdin suture	Suture pad + suture materials		

		A3.7.	Purse-string-suture	Suture pad + suture materials		
		A3.8.	Lembert suture	Suture pad + suture materials		
		A3.9.	Schmieden suture	Suture pad + suture materials		
		A3.10.	Trapping suture	Suture pad + suture materials		

Small animal skills						
Clinical examination/propaedeutics						
Learning station					Manufacturer	Number
P1	**Injection techniques & blood sampling**	P1.1.	Venipuncture (dog)	Canine leg models + venipuncture pads	Erler Zimmer Vetiqo In-house manufacture	3 2 2
		P1.2.	Intravenous injection (dog)	Canine leg models + venipuncture pads	Erler Zimmer Vetiqo In-house manufacture	3 2 2
		P1.3.	Vein catheter (dog)	Canine leg models + venipuncture pads	Erler Zimmer Vetiqo In-house manufacture	3 2 2
		P1.4.	Intramuscular injection (dog)	„Ingo“ Canine injection model	In-house manufacture	1
		P1.5.	Subcutaneous injection (dog)	„Ingo“ Canine injection model	In-house manufacture	1
P2	**Auscultation**	P2.1.	Auscultation of the heart	Heart and Lung Sound Simulator	Rescue Critters	2
		P2.2.	Auscultation of the lungs	Heart and Lung Sound Simulator	Rescue Critters	2
P3	**Blood pressure measurement**	P3.1.	Doppler-Method	none	n/a	0
Internal medicine						
I1	**Sonography**	I1	FAST Sonography	Ultrasound	Easote My lab One Vet	1
I2	**Intubation**	I2	Intubation (dog)	Canine Intubation Model	SynDaver	1

I3	**Oxygen cannula**	I3	Applying a nasal oxygen cannula	Cannula model	In-house manufacture	1
I4	**CPR**	I4	CPR	Critical Care Jerry	Rescue Critters	2
I5	**ECG**	I5	ECG	Critical Care Jerry	Rescue Critters	2
I6	**Fluid therapy**	I6.1.	Drip & infusion pump	Canine leg models + venipuncture pads	Erler Zimmer Vetiqo In-house manufacture	3 2 2
I7	**Urine analysis**	I7.1.	Urethral Catheter (bitch)	Canine Female Urinary Catheter Model	HolSim	(1 – currently under repair)
		I7.2.	Urethral Catheter (male cat)	Male feline urinary catheter model	HolSim + In-house manufacture	1 + 4
		I7.3.	Ultrasound-guided cystocentesis (cat)	Cystocentesis models	In-house manufacture	2
		I7.4.	Urine analysis	None	None	None
I8	**Abdomen**	I8.1.	Abdominocentesis (dog)	None	None	None
		I8.2.	Punctate analysis	None	None	None
I9	**Thorax**	I9.1.	Thoracocentesis	„Thora“ - thorax model (dog)	In-house manufacture	1
		I9.2.A	Chest drain - Trocar	„Thora“ - thorax model (dog)	In-house manufacture	1
		I9.2.B	Chest drain – Seldinger technique	„Thora“ - thorax model (dog)	In-house manufacture	1
Surgery & Anesthesia						
C1	**Bandaging**	C1.1.	Forelimb bandage	K9 Breath Sound and Heart Sound Simulator	Rescue Critters	2
		C1.2.	Robert-Jones bandage	K9 Breath Sound and Heart Sound Simulator	Rescue Critters	2
		C1.3.	Paw bandage	K9 Breath Sound and Heart Sound Simulator	Rescue Critters	2
		C1.4.	Ear bandage	K9 Breath Sound and Heart Sound Simulator	Rescue Critters	2
		C1.5.	Head bandage	K9 Breath Sound and Heart Sound Simulator	Rescue Critters	2

C2	**Spaying**	C2.1.	Ovariectomy (bitch)	Spay simulator (+ replaceable uterus)	Veterinary Simulator Industries (+ in-house manufacture)	5 (+ as required)
		C2.2.	Ovariohysterectomy (bitch)	Spay simulator	Veterinary Simulator Industries (+ in-house manufacture)	5 (+ as required)
C3	**Anesthesia**	C3.1.	Epidural anesthesia (dog)	None	None	None
		C3.2	Femoralis block	None	None	None
C4	**Wound management**	C4.1.	Wound preparation	Wound management model	In-house manufacture	2
		C4.2.	Passive drain (Penrose)	Wound management model	In-house manufacture	2
		C4.3.	Active drain (Redon)	Wound management model	In-house manufacture	2
Ophthalmology						
O1	**Anatomy**	O1.1.	Anatomy of the eye	Eye model, enlarged by a factor of 5	Leybod	1
O2	**Clinical examination of the eye**	O2.1.	Schirmer tear test (dog)	Eye exam model	In-house manufacture	1
		O2.2.	Focal light source	Eye exam model	In-house manufacture	1
		O2.3.	Ophthalmoscopy	Eye exam model	In-house manufacture	1
		O2.4.	Flushing nasolacrimal ducts	Eye exam model	In-house manufacture	1
		O2.5.	Exposing third eyelid (dog)	Eye exam model	In-house manufacture	1
		O2.6.	Tonometry	Eye exam model	In-house manufacture	1
O3	**Disorders of the eye**	O3.1.	Cataracts	Cataract model	Phywe	1
		O3.1.	Corneal disorders	Cornea model	Erler Zimmer	1
Obstetrics & Gynecology						
R1	**Gynecology**	R1.1.	Vaginoscopy (bitch)	Gyndog	Vetiqo	2
		R1.2.	Vaginal cytology (bitch)	Gyndog	Vetiqo	2
R2	**Neonatology**	R2.1.	Neonatal resuscitation (puppy)	Puppy simulators	Vetiqo	9
R3	**Dystocia**	R3.1.	Fetal heartrate	Ultrasound	Easote Mylab One Vet	1
		R3.2.	Conservative birthing assistance	Gyndog	Vetiqo	2

Equine skills						
Clinical examination/propedeutics						
Learning station				Material	Manufacturer	Number
P1	**Handling & restraint**	P1.1.	Haltering	Equine model + Halter	Veterinary Simulator Industries + In-house manufacture	1 + 1
		P1.2.	Use of the nose twitch	In progress	In-house manufacture	1
P3	**Rectal examination**	P3.1.	Transrectal palpation	Equine model with gastrointestinal tract	Veterinary Simulator Industries	1
P4	**Injections**	P4.1.	Intramuscular injection	Equine model	Veterinary Simulator Industries + In-house manufacture	1 + 1
		P4.2.	Subcutaneous injection	Equine model	Veterinary Simulator Industries + In-house manufacture	1 + 1
		P4.3.	Intravenous injection	Equine model	Veterinary Simulator Industries + In-house manufacture	1 +1
P5	**Blood withdrawal, venous catheter**	P5.1.	Venous blood sample	Equine model	Veterinary Simulator Industries	1
		P5.2.	Arterial blood sample	Equine model	In-house manufacture	Currently under repair
		P5.3.A	Short-term venous catheter	Equine model	Veterinary Simulator Industries	1
		P5.3.B	Long-term venous catheter	Equine model	Veterinary Simulator Industries	1
Internal medicine						
I1	**Abdominocentesis**	I1.1.	Abdominocentesis	Equine model	In-house manufacture	1
		I1.2.	Punctate analysis	In progress		
I2	**Caecocentesis**	I2.1.	Caecocentesis	In progress		
I3	**Nasogastric tubing**	I3.1.	Nasogastric tubing	Equine model	South Africa	1
I4	**ECG**	I4.1.	Electrode positioning	Equine model	In-house manufacture	1
		I4.2.	Analyzing the ECG	ECGs	n/a	n/a
Surgery & Anesthesia						
C1	**Bandages**	C1.1.	Distal limb bandage	Equine model	Veterinary Simulator Industries + In-house manufacture	1 + 1

		C1.2.	Hoof bandage	Equine leg model	HolSim	8
		C1.3.	Distal limb cast	Equine leg model	HolSim	8
		C1.4.	Hoof cast	Equine leg model	HolSim	8
C2	**Wound management**	C2.1.	Scrub, Debridement & Lavage	Wound model	In-house manufacture	2
		C2.2.	Local anesthesia	Wound model	In-house manufacture	2
Obstetrics & Gynecology						
R1	**Gynecology**	R1.1.	Gynecological exam	Equine model	Veterinary Simulator Industries	1
		R1.2.	Uterine swab (mare)	Equine model	Veterinary Simulator Industries	1
		R1.3.	Artificial insemination	Equine model	Veterinary Simulator Industries	1
Imagery						
B1	**Radiology**	B1.1.	Standard fetlock 45/135	Equine limbs + portable x-ray machine		6 + 1
		B1.2.	Standard fetlock dorsopalmar	Equine limbs + portable x-ray machine		6 + 1
		B1.3.	Standard fetlock lateromedial	Equine limbs + portable x-ray machine		6 + 1
		B1.4.	Standard dorsopalmar hoof	Equine limbs + portable x-ray machine		6 + 1
		B1.5.	Standard lateromedial hoof	Equine limbs + portable x-ray machine		6 + 1
		B1.6.	Standard Morgan Skyline	Equine limbs + portable x-ray machine		6 + 1
		B1.7.	Standard Oxspring hoof	Equine limbs + portable x-ray machine		6 + 1
		B1.8.	Standard Tarsus 45	Equine limbs + portable x-ray machine		6 + 1
		B1.9.	Standard Tarsus 135	Equine limbs + portable x-ray machine		6 + 1
		B1.10.	Standard Tarsus dorsopalmar	Equine limbs + portable x-ray machine		6 + 1
		B1.10.	Standard Tarsus lateromedial	Equine limbs + portable x-ray machine		6 + 1

Ruminant skills						
Clinical examination/propedeutics						
Learning station				Material	Manufacturer	Number
P1	**Handling**	P1.1.	Haltering	Bovine model	Reality Works	1
		P1.2.	Cattle crush	In progress		
P3	**Administering medication**	P3.1.	Subcutaneous injection	Molly the calf + injection pads	In-house manufacture	1, 3
		P3.2.	Intramuscular injection	Molly the calf + injection pads	In-house manufacture	1, 3
		P3.3.	Intravenous injection	Venipucture pads	Vetiqo + in-house manufacture	4
		P3.4.	Venous catheter (jugular vein, cow)	Bovine model	Reality Works	1
		P3.5.	Venous catheter (ear, calf)	In progress		
		P3.6.	Intravenous fluids (cow)	Bovine model	Reality Works	1
		P3.7.	Intravenous fluids (calf)	In progress		
P4	**Sampling & processing samples**	P4.1	Blood sample small ruminant (V. jugularis)	Venipucture pads	Vetiqo + in-house manufacture	4
		P4.2.	Blood sample cow (V. jugularis)	Bovine model	Reality Works	1
		P4.3.	Blood sample cow (tail vein)	Tail vein model	In-house manufacture	Currently under repair
		P4.4.	Deep pharyngeal swab (cow)	Swab model (cow)	In-house manufacture	1
		P4.5.	Category B sample processing	Packaging material	Miscellaneous	n/a
Internal medicine						
I1	**Nasogastric tubing**	I1.1.	Nasogastric tube (calf)	Tube model „Molly“	In-house manufacture	2
		I1.2.	Nasogastric tube (cow)	In progress		
I2	**Trocarisation**	I2.1.	Buff-Trocar	Bloated calf model “Molly”	In-house manufacture	1
I3	**Euthanasia**	I3.1.	Injection euthanasia	Bovine model	Reality Works	1
Surgery & Anesthesia						
C1	**Local anesthesia**	C1.1.	Infiltration of the incision line (flank, cow)	Flank model „Fiona“	In-house manufacture	1
			Inverted L Block	Flank model „Fiona“	In-house manufacture	1
			Distale daravertebral ansthesia	Flank model „Fiona“	In-house manufacture	1

			Proximal paravertebral anesthesia	Flank model „Fiona“	In-house manufacture	1
			Modified paravrtebral anesthesia	Flank model „Fiona“	In-house manufacture	1
			Retrograde i.v. anesthesia (foot)	Foot model, in progress		
			Epidural anesthesia (cow)	Epidural anesthesia model (bovine)	In-house manufacture	1
			Epidural anesthesia (small ruminant)	In progress		
C2	**Bandages**	C2.1.	High hoof bandage	Cow foot	In-house manufacture	2
		C2.2.	Low hoof bandage	Cow foot	In-house manufacture	2
C3	**Disbudding calf**	C3.1.	Anesthesia of the horn	In progress		
		C3.2.	Disbudding	In progress		
C4	**Abomasal displacement**	C4.1	Omentopexy	In progress		
Obstetrics & Gynecology						
A1 – A3	**Andrology**	A1.3.	Testicular anomalies	Testicle models	In-house manufacture	7
		A2.1.	Artificial vagina	Artificial vagina	Miscellaneous	6
		A2.2.	Semen collection (bull)	Bull model	In-house manufacture	1
		A3.1.	Macroscopic examination of semen	Semen samples	Miscellaneous	2
		A3.2.	Motility (semen)	Semen samples + microscope	Miscellaneous	2
		A3.3.	Vitality (semen)	Semen samples + microscope	Miscellaneous	2
		A3.4.	Concentration (semen)	Semen samples + microscope	Miscellaneous	2
A4	**Gynecology**	A4.1.	Vaginal examination	Bovine simulator	Veterinary Simulator Industries	1
		A4.2.	Metricheck	Bovine simulator	Veterinary Simulator Industries	1
		A4.3.	Transrectal palpation	Bovine simulator	Veterinary Simulator Industries	1
A5	**Udder health**	A5.1.	California Mastitis Test	Udder model	IC KUH	1
		A5.2.	Sterile milk sampling	Udder model	IC KUH	1
A6	**Dystocia**	A6.3.	Position, presentation diagnosis	Calving simulators + calf model	Veterinary Simulator Industries + In-house manufacture	3 + 3
A7	**Neonatology**	A7.1.	Initial care of the newborn calf	Calf model	Veterinary Simulator Industries	3
B1	**Andrology**	B1.1.	Loading the AI gun	Bovine simulator	Veterinary Simulator Industries	1

		B1.2.	Artificial insemination	Bovine simulator	Veterinary Simulator Industries	1
B2	**Gynecology**	B2.1.	Bühner stitch	Vagina model	In-house manufacture	6
		B2.2.	Flessa stitch	Vagina model	In-house manufacture	6
		B2.3.	Bickhardt stitch	Vagina model	In-house manufacture	6
B5	**Surgery**	B5.1.	Castration techniques	Castration model	In-house manufacture	4
B6	**Gynecology**	B6.1.	Repositioning the prolapsed uterus	Uterus Prolapse Model	In-house manufacture	1
B7	**Udder health**	B7.1.	Superficial teat injury	Silicone teat	In-house manufacture	6
		B7.2.	Deep teat injury	Silicone teat	In-house manufacture	6
		B7.3.	Perforating teat injury	Silicone teat	In-house manufacture	6
		B7.4.	Teat amputation	Silicone teat	In-house manufacture	6
C1	**Gynecology**	C1.1.	Casting (cow)	Bovine model „Henriette“	Lifesize cow model with in-house adaptations	1
		C1.2.	Fetal extraction	Extraction model + calf simulator	In-house manufacture	1
		C1.3.	Obstetrical instruments	Obstetrical instruments	Miscellaneous	n/a
C2	**C-section (cow)**	C2.1.	Local anesthesia of the flank	Suture pads (abdominal wall)	In-house manufacture	2
		C2.2.	Incision	Suture pads (abdominal wall)	In-house manufacture	2
		C2.3.	Repositioning the uterus	Bovine model „Henriette“	Lifesize cow model with in-house adaptations	1
		C2.4.	Closure	Suture pads (abdominal wall)	In-house manufacture	2

Other farm animal skills						
Pigs						
Learning station				Material	Manufacturer	Number
P1	**Handling**	P1.1.	Ear tagging	Pig model „Peter“	Vetiqo	1
P3	**Administering medication**	P3.1.	Subcutaneous injection	Pig model „Peter“	Vetiqo	1
		P3.2.	Intramuscular injection	Pig model „Peter“	Vetiqo	1
		P3.4.	Intravenous injection	Pig model „Peter“	Vetiqo	1
P4	**Sampling & processing samples**	P4.1.	Blood sample piglet	Pig model “Weany”	Vetiqo	1
I1	**Euthanasia**	I1.1.	Euthanasia (injection)	Pig model „Peter“	Vetiqo	1
C1	**Castration**	C1.1.	Piglet castration	Pig model „Castro“	Vetiqo	1
Poultry						
G1	**Handling**	G1.1.	Handling Chickens	Chicken model „Hertha“	In-house manufacture	2
		G1.2.	Handling Pigeons	Pigeon model “Emil”	In-house manufacture	1
G2	**Sampling**	G2.1.	Tracheal swab chicken/pigeon	Chicken model/pigeon model	In-house manufacture	2/1
		G2.2.	Cloacal swab chicken/pigeon	Chicken model/pigeon model	In-house manufacture	2/1
		G2.3.	Crop swab chicken/pigeon	Chicken model/pigeon model	In-house manufacture	2/1
		G2.4.	Choanal swab chicken/pigeon	Chicken model/pigeon model	In-house manufacture	2/1
		G2.5.	Blood sample V. ulnaris	Chicken model/pigeon model	In-house manufacture	2/1
		G2.6.	Blood sample V. jugularis	Chicken model/pigeon model	In-house manufacture	2/1
		G2.7.	Blood sample V. metatarsalis	Chicken model/pigeon model	In-house manufacture	2/1
G3	**Administering medication**	G3.1.	Subcutaneous injection	Chicken model/pigeon model	In-house manufacture	2/1

		G3.2.	Intramuscular injection	Chicken model/pigeon model	In-house manufacture	2/1
		G3.4.	Intravenous injection	Chicken model/pigeon model	In-house manufacture	2/1
Food safety						
F1	**Captive bolt gun**	F1.1.	Captive bolt gun cow	Bolt gun model cow	Veterinary Simulator Industries	2
		F1.2.	Captive bolt gun bull	Bolt gun model bull	Veterinary Simulator Industries	2
		F1.3.	Captive bolt gun sow	Bolt gun model sow	Veterinary Simulator Industries	2
		F1.4.	Captive bolt gun hog	Bolt gun model hog	Veterinary Simulator Industries	2
		F1.5.	Captive bolt gun handling	Bolt gun	Miscellaneous	2

Appendix to 7.1.6.: Services available to students at the VEE

Local services available at the VEE

- First semester orientation week
- Peer mentoring programme for first-year students
- Academic advising (from the Study Office / Vice Dean for Study Affairs)
- Student academic advising (from students for students)
- Study Office
- Subject, Module and EPT Coordinators
- Chairs of examining boards
- Liaison teacher for students
- Liaison students for students
- Women's Representative and Diversity Representative
- support.points
- Animal Welfare Officials
- Liaison Officers Pursuant to the Statutes for Safeguarding Good Scientific Practice
- Veterinary Medical Student Organisation Berlin (VetMed-FSI)
- BAföG (Federal Education and Training Assistance Act) Coordinator
- Coordinator for International Relations, Partnerships and Visiting Students
- Buddy programme of the International Veterinary Students Association (IVSA)
- Veterinary Skills Net
- Progress Test for veterinary medicine (PTT)
- Career planning & development

Selected central services available at Freie Universität Berlin and beyond

- Student Service Center
- General Student Body Council (Allgemeiner Studentenausschuß - AStA)
- International Student Mobility - Welcome Service
- Student Union Berlin (studierendenWERK Berlin)
- Dual Career & Family Service
- Women's Representative and Diversity Representative
- Liaison Officers Pursuant to the Statutes for Safeguarding Good Scientific Practice
- Representatives and services for students with disabilities

Details on the described services:

First semester orientation week
At the start of each academic year, the VEE in close collaboration with the Veterinary Medical Student Organisation (VetMed-FSI) offers a several-day orientation and information event for incoming first-year students. In presentations, seminars, guided tours and through handouts, the new students receive relevant information regarding the VEE and course of study. As part of the mentoring programme, students in higher semesters act as mentors for small groups of incoming students during the first year of study.

Peer mentoring programme for first-year students
The VEE provides mentoring support to first-year students. A coordinator (0.5 FTE) and 12-14 student peers (recruited from 2nd and 3rd year and specifically trained – see figure 2) organize a

mentoring programme for new students that consists of small group activities related to study expectations, working and learning strategies, study organization, time management and related subjects. In addition to the small group peer-to-peer mentoring in first year, specific one-day workshops with internal and external lecturers are organized by the mentoring coordinator for 5th semester student (transition into the clinical phase) and 7th year students (exit phase, focus on working in the veterinary profession).

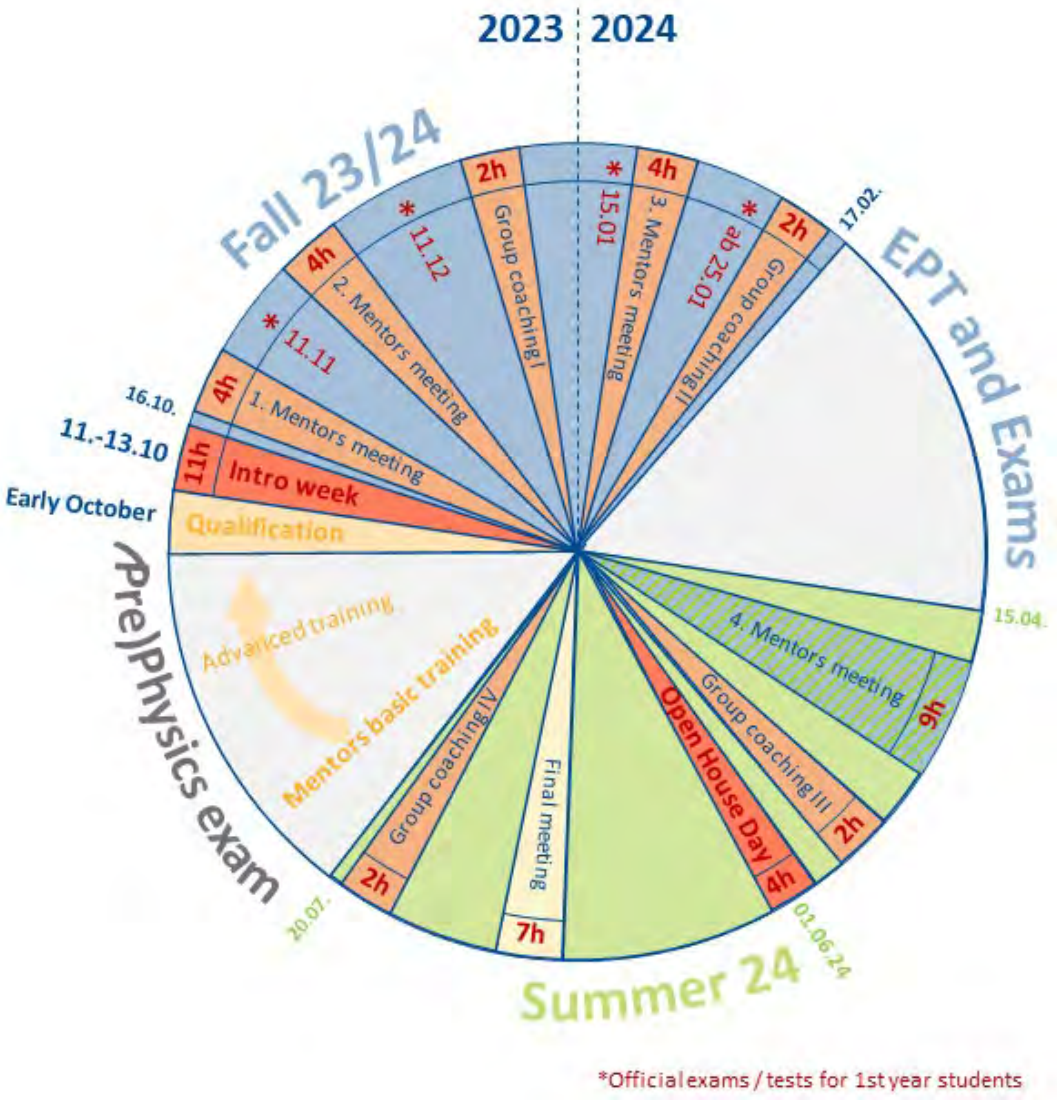


Figure 1 Schedule for the Student Mentees in the SUPPORT Mentoring Programme for the academic year 2023/24

Academic advising

Academic advising takes place within all departments of Freie Universität Berlin in accordance with § 28 of the BerlHG. Therein the employees of the Study Office as well as the Vice Dean for Study Affairs are set out. Staff members from the Study Office and the Dean's Office advise students on all questions pertaining to study processes and support them in difficulties which may arise in the course of university studies.

Student academic advising

The student representatives for student academic advising supports students in the meaningful planning and implementation of their university studies taking into account their individual skills

and living situations. Student academic advising is determined by student representatives at the Faculty Council.

Study Office
The Study Office is the VEE's central point of contact for student matters and study organization. In addition to general advice on the individual course of study, the Study Office is also the point of contact for special advice on maternity protection and compensation for disadvantages. The Study Office is also the official point of contact for EPT providers and distributes comments and requests to the responsible persons at the VEE.

Subject, module and EPT coordinators
For questions related to specific subjects, courses, modules or EPT, appointed coordinators are available to the students.

Chairs of examination boards
The chairs of the preclinical and clinical examination boards serve as contact points for all issues related to accepting courses and EPT taken abroad, the State examination process and also special study plans for students that have to interrupt their course of study for personal reasons including pregnancy and maternity leave.

Liaison teachers for students
Students with personal problems or conflicts with lecturers can contact the Liaison Officers for Students and discuss their issues with them in confidence. The Liaison Officer for Students provides advice and periodically reports to the Working Group "Complaint Management" without disclosing students' identities.

Liaison students for students
As an alternative to Liaisoon Officers, students with study-related conflicts can also contact Liaison Students and discuss their issues with them in confidence. Liaison Students are also included in the periodical meetings of the working group "Complaint Management" where significant issues are discussed under strict observation of anonymity.

Women’s Representative and Diversity Representative
All gender and diversity-related issues are reported to the local Women’s Representative and local Diversity Representative, respectively, who are also in charge of all students´ concerns, both among students and between students and VEE / staff. There are separate Women’s Representative and Diversity Representative at the VEE and at Freie Universität Berlin, and either one may be contacted by the students.

support.point
To promote mental health, Freie Universität offers low-theshold counselling for students and staff in challenge situtations since 2022. Professional psychologists have weekly office hours in each department that are open to students and staff with and without appointment. Since 2024, support.point also organizes Mental Health First Aid Workshops for teaching staff, especially Liaison Officers, to increase competences when dealing with mental health issues and to enable adequate advising.

Animal Welfare Official
All animal welfare questions and concerns such as potential welfare issues experienced during EPT can be discussed with the Animal Welfare Officer of the VEE.

Liaison Officers Pursuant to the Statutes for Safeguarding Good Scientific Practice
There are two professorial representatives to be contacted by undergraduate students, graduate students and staff for any concern related to good scientific practice. They confer with the University Representative for Good Scientific Practice and the University legal office when needed. All representatives are trained regularly, keep minutes on each reported issue and have to comply with complex national and university guidelines.

Veterinary Medical Student Organisation (VetMed-FSI)
The organisation currently has approx. 60 active student members from all semesters. The FSI represent the whole student body within the VEE and has the following responsibilities:

- Representation of student issues and interests at the VEE and the University.
- Nomination of student representatives for the Faculty Council, the Education and the Continued Eduction Commission and ad-hoc committees with student participation.
- Networking among students.
- Organise or support events of the VEE such as the Open Campus day, the Orientation week for incoming students, a summer and a Christmas party, etc.
- Nomination of representatives in the Federal Veterinary Medical Student Association (bvvd) and the International Veterinary Students' Association (IVSA).

BAföG (Federal Education and Training Assistance Act) Coordinator
Students are supported in applying for Federal study loans (BAföG) by two official representatives at the School.

Coordinator for International Relations, Partnerships and Visiting Students
The Coordinator for International Relations, Partnerships and Visiting Students is responsible for negotiating learning agreements for incoming and outgoing international students. She / he supports incoming and outgoing international students during all phases of their stay abroad. She / he is the point of contact when incoming students need to sit remote exams with their home university. Specific examples of local mobility services overseen by the Coordinator include:

- Establishment of an ECTS Brochure with details regarding the course of study and credits in both German and English.
- Website with information on student mobility and Erasmus[4].
- Annual information event „Going abroad - just do it" for outgoing students and information days for incoming (Erasmus) students
- Brochure and process documentation related to the issue and organisation of international study (exchange) programmes provided on the School website.

Buddy programme of the International Veterinary Students Association (IVSA)
In support of the efforts of the Coordinator for International Relations, Partnerships and Visiting Students, IVSA runs a buddy programme for incoming international students to guide them through the study environment of the VEE and to support them with the selection and organization of courses.

Veterinary Skills Net
The Veterinary Skills Net is described in detail in Standard 6.3.

[4] http://www.vetmed.fu-berlin.de/studium/studierendenmobilitaet/index.html

Progress test for veterinary medicine (PPT)[5]

The PTT is an interdisciplinary learning outcome assay with 136 MC questions. The PPT was developed within the Compentence Center for E-Learning, Didactics and Educational Research in Veterinary Medicine (KELDAT) for the German, Austrian and Swiss veterinary schools and in 2013 run for the first time. Test content is referring to Day One Competences as defined by the European Association of Establishments for Veterinary Education (EAEVE). The test questions are contributed by teaching staff of all participating veterinary institutions and subject to a multistage review process. The same set of questions is being presented to all students. Besides a choice of 4 answers, there is an option "I do not know" to encourage students to honestly appreciate their knowledge.

The objective is to provide students with individual feedback to their level of acquired knowledge and understanding (a) within the course of study and (b) related to other students in the same semester (see Figure 1). The Dean's Office receives a summary of the results over all students of the VEE that participated in the test.

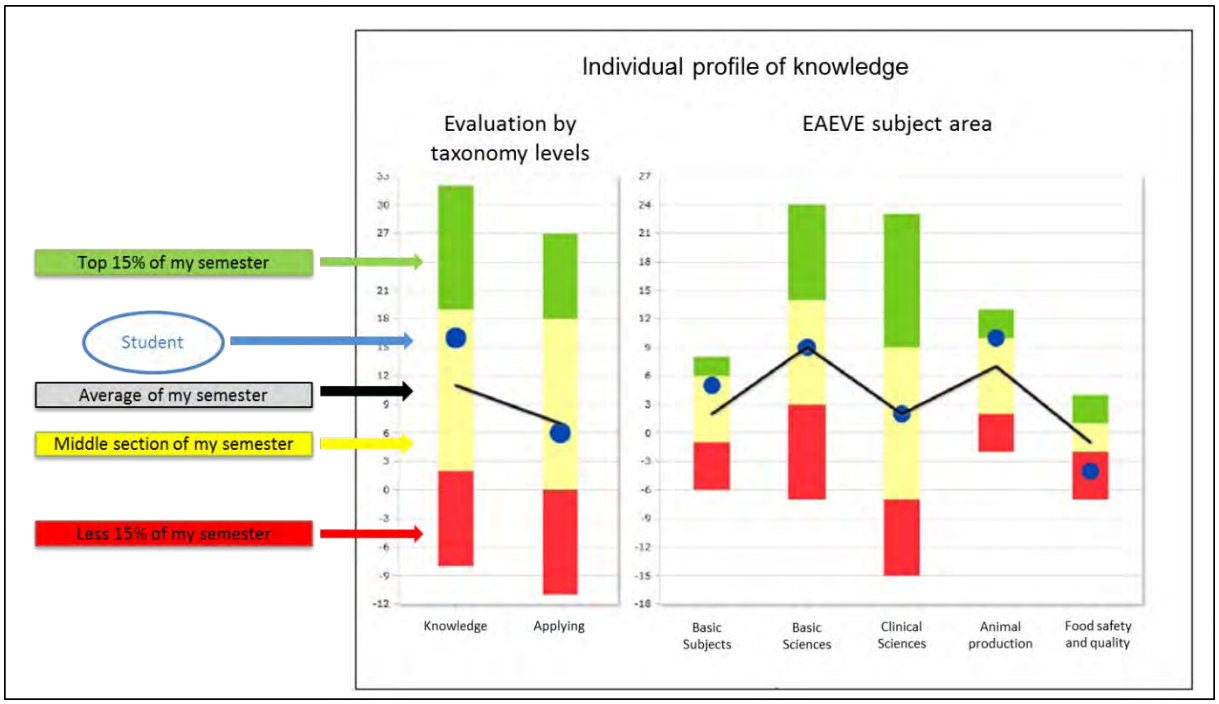


Figure 2 Graphical feedback of PPT results to individual students

Career planning & development

The Schools integrates students with veterinary professionals of all disciplines and makes career options visible at many occasions. Prominent examples are:

- Invitation of veterinarians to participate in lectures and to present their individual fields in subjects like Veterinary Profession & Legislation and Ethology and Animal Welfare.
- Providing a great choice of electives related to scientific work, as well as opportunities to attend journal clubs and other activities that introduce them to a career in research.
- The mentoring team supported by the Dean's Office organizes an annual career day. The Dean's office further organizes the Berlin Veterinary Get-Together together with the Society of Friends and Sponsors of Veterinary Medicine at Freie Universität Berlin, the Berlin Veterinary Society and the Veterinary Chamber Berlin.

[5] https://www.vetmed.fu-berlin.de/studium/qualitaetssicherung/keldat/ptt/index.html

Student Service Center of Freie Universität Berlin
The Student Service Center is an integrated point of contact for all issues related to study at Freie Universität Berlin. Students and prospective students with questions may contact the different services of the Service Center by phone, email, or in person. The **Info-Service Studium** is run by the Registration Office and the Admissions Office and functions as welcome and central information service. Further services include, the **General Study Counselling**, the **Psychological Counselling**, **Student Mobility**, **Application and Admission**, **Student Administration** and **Study Barrier-free**.

General Student Body Council (Allgemeiner Studentenausschuß - AStA)
The AStA complements the VetMed-FSI at University level. In addition to counselling on social/financial difficulties, AStA offers special advice for disabled students and support for foreign students, and answers questions concerning BAföG (Federal Education Promoting Act; study loans granted to students depending on the family income).

The **International Student Mobility-Welcome Service** provides counselling to students concerning opportunities for study abroad (including scholarships), informs them about partner universities, and also advises foreign students enrolled at Freie Universität Berlin. The partner institution database provides information regarding Erasmus exchange student opportunities[6].

Student Union Berlin (studierendenWERK Berlin)
Counselling and advisory services offered by the Student Union Berlin

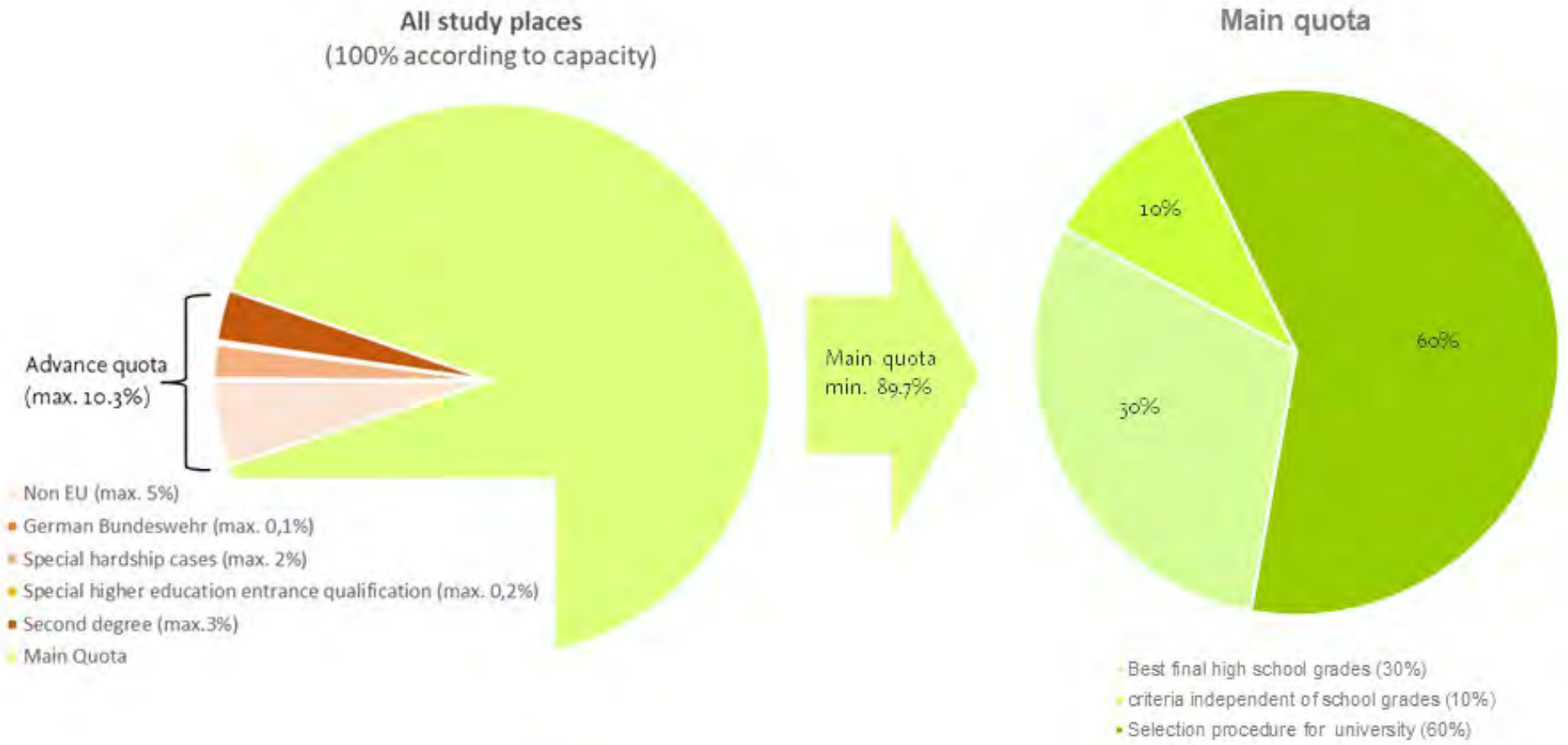
- Advice and help with regard to BaFöG (Federal Education Promoting Act).
- Advice and support for disabled and chronically ill students.
- General counsel on all financial/social questions regarding study, e.g., finances; help regarding accommodation, public transport within and outside of the university, as well as personal problems and crisis situations.
- Administration of emergency funds for students in acute financial difficulties.
- Psychotherapeutical counselling for students: The Student Union Berlin offers such counselling to all students in such a need. Counselling and therapy are provided free of charge.
- Support and counsel of pregnant women.

Dual Career & Family Service
Freie Universität has been certified by audit familiengerechte hochschule since June 2007. In addition, the university signed the "Familie in der Hochschule" charter in June 2015. By embracing family-friendly personnel policies and a family-friendly university structure, Freie Universität helps its members to better balance working life, studies, and academic qualification processes with family responsibilities. The Dual Career & Family Service also offers all members of the Freie Universität community information and confidential advising services on all questions relating to better balancing work, studies, and family life.

Representatives and services for students with disabilities
The support for disabled and ill students is decribed in Standard 7.3.1.2.

[6] https://fuberlin.moveon4.de//publisher/2/deu

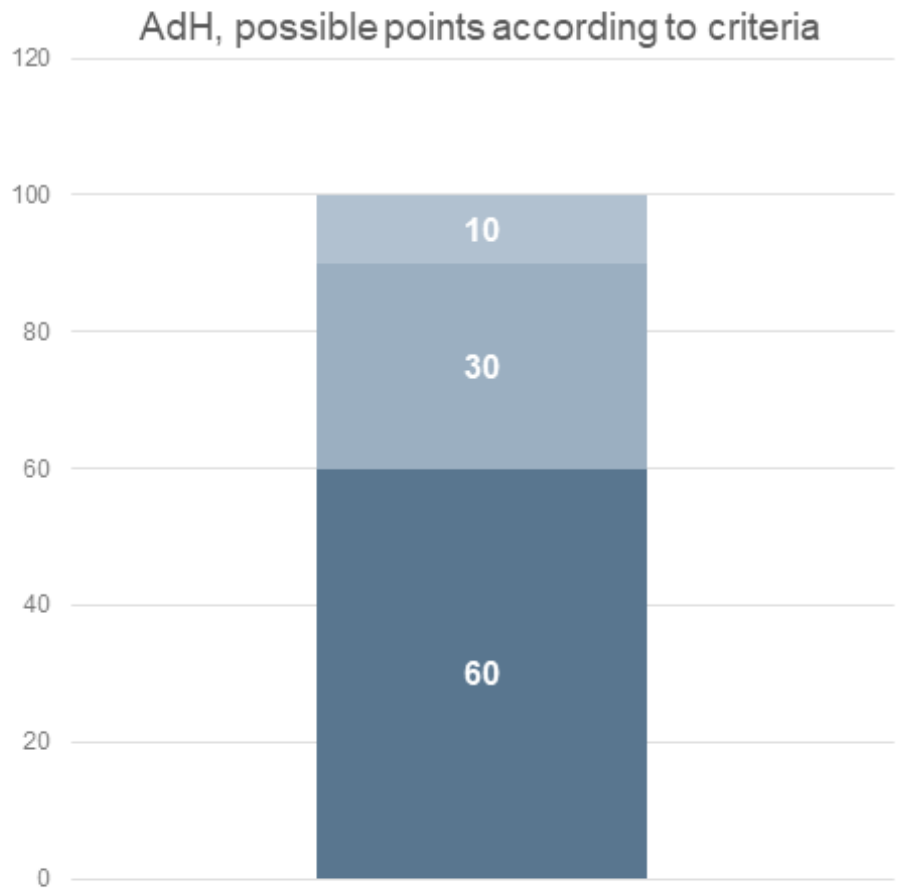
Appendix to 7.3.1.1.: Breakdown of Student Admissions in Veterinary Medicine



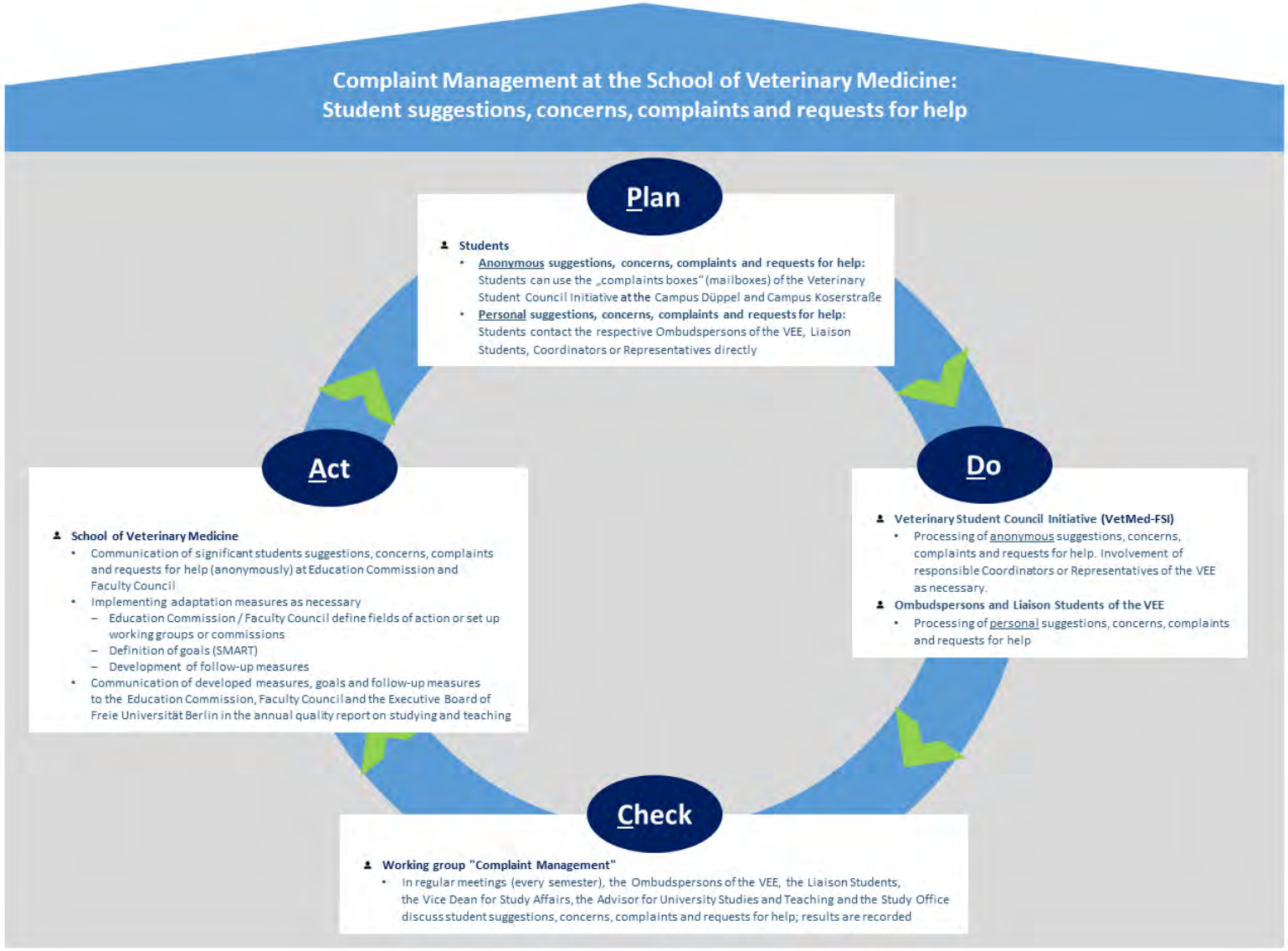
Calculating Selection Procedure for University (AdH)

A maximum of 100 points can be obtained in the selection procedure. A mathematically possible higher score will not be taken into account.
Evaluation criteria:

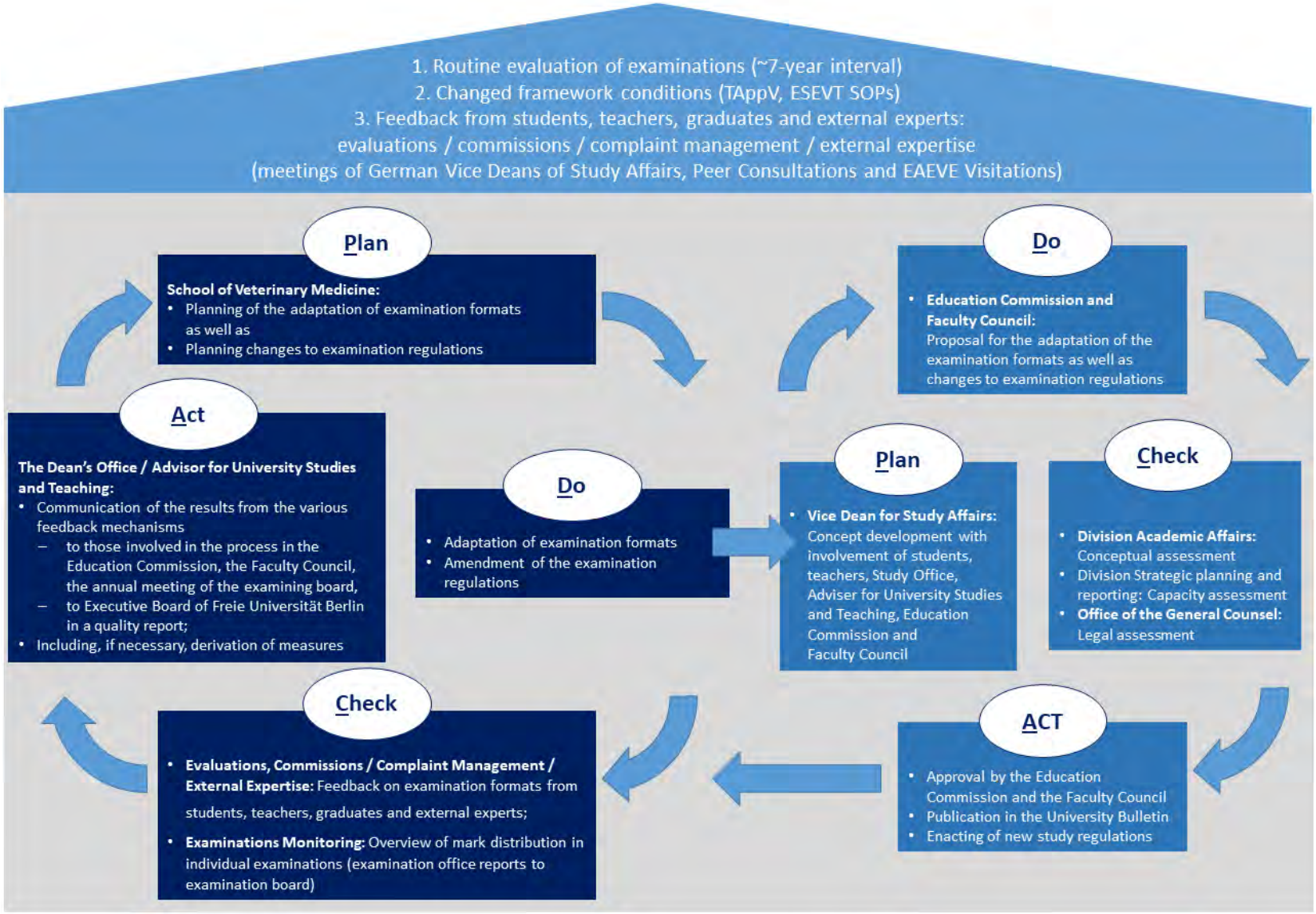
- Completed vocational training (10 points)
- subject-specific academic aptitude test (max. 30 points)
- Abitur mark (max. 60 points)



Appendix to 7.8.1.: PDCA cycle “Complaint Management at the School of Veterinary Medicine: Student suggestions, concerns, complaints and requests for help”



Appendix to 8.3.1.: PDCA cycle “Adaptation of examination formats / (further) development of examination regulations”



Appendix to Standard 9: Overview of the cooperative members of the School of Veterinary Medicine of Freie Universität Berlin

Scientific Institutions	Name	Postion	Title	Veterinarian	Teaching responsibility in hrs / week
3	BRAUN, BEATE	Private lecturer	PD Dr.	0	1.00
4	LOH, GUNNAR	Private lecturer	PD Dr.	1	1.00
4	PIEPER, ROBERT	Private lecturer	PD Dr.	0	1.00
4	RÖHE, ILEN	Private lecturer	PD Dr.	1	1.00
5	BLOME, SANDRA	Private lecturer	PD Dr.	1	1.00
6	GENERSCH, ELKE	Extraordinary professor	Prof. Dr.	0	1.00
7	CONRATHS, FRANZ JOSEF	Extraordinary professor	Prof. Dr.	1	1.00
7	WALTHER, BIRGIT	Private lecturer	PD Dr.	1	1.00
7	WIELER, LOTHAR HEINZ	Adjunct professor	Prof. Dr.	1	1.00
8	HENSEL, ANDREAS	Adjunct professor	Prof. Dr.	1	1.00
11	DIETRICH, KAI	Teaching assignment		1	1.00
12	BREITHAUPT, ANGELE	Teaching assignment	Dr.	1	1.00
12	KNIERIEMEN, ANDREAS	Teaching assignment	Dr.	1	1.00
12	PAULI, ANDREAS	Teaching assignment	Dr.	1	1.00
14	REX, ANDRE	Extraordinary professor	Prof. Dr.	1	1.00
14	SANDER, SVENJA	Private lecturer	PD Dr.	1	1.00
18	ARLT, SEBASTIAN	Private lecturer	PD Dr.	1	1.00
18	FISCHER-TENHAGEN, CAROLA	Private lecturer	PD Dr.	1	1.00
18	TENHAGEN, BERND ALOIS	Private lecturer	PD Dr.	1	1.00
20	NICKEL, RAFAEL	Adjunct professor	Prof. Dr.	1	1.00
20	SKRODZKI, MARIANNE	Private lecturer	PD Dr.	1	1.00
20	VON PÜCKLER VON SCHWICHOW, GRÄFIN KERSTIN	Teaching assignment	PD Dr.	1	1.00

Appendix to 9.1.1.a.: Structured teaching qualification programme of Freie Universität Berlin via the Dahlem Center for Academic Teaching (DCAT)

The core component of DCAT's offers for teaching is the modular certificate programme, which is especially aimed at young academics with little or no teaching experience. The certificate programme is modular and allows for flexible and individual completion of the separate components. The successful completion of all modules leads to the acquisition of the Higher Education Didactics Certificate of Freie Universität Berlin. The full certificate programme consists of a **5-day basic modul**e, a **portfolio workshop**, a **transfer workshop** and a total of **6 days of an advanced module**. At the end of the certificate programme, there is a semester-long **teaching project**. At the same time, participants also complete a **teaching portfolio**.
The programmes are free of charge for members of Freie Universität Berlin.

Semester	Module 1	Module 2	Module 3	Module 4
1st	Basic Module (5 days)			
2nd		Portfolio workshop	Advanced module (2 days)	
3rd		Transfer workshop	Advanced module (2 days)	
4th			Advanced module (2 days)	Teaching Project

Overview 1 Schematic representation of the modular structure of the certificate programme

Module	Contents
Module 1 / Basics	• This module covers the basics of knowledge transfer, methods of university teaching, peer observation and counselling.
Module 2 / Portfolio and Transfer	• Development of a portfolio (written reflection of professional activity within higher education teaching). • Modul 2 starts with the portfolio workshop and ends with a transfer workshop.
Module 3 / Advanced Module	• This module includes a total of 6 workshop days, which can be individually selected from the open course programme, e.g.: - Demonstrating, explaining, presenting - Managing interaction in learning groups - Motivating of learners - Research-based and problem-oriented learning and teaching - Gender and diversity in university teaching - Performance assessment and performance feedback
Module 4 / Teaching Project	• Support in the realization of the teaching project - Individual development, implementation and reflection on innovative teaching intentions; supported by collegial consultation

Overview 2 Contents of the modules within the certificate programme

Appendix to 9.1.1.b: Specialist Personnel Development Programmes for Academic Staff Members of Freie Universität (Selection)

See also Appendix to 9.1.1.a.: Structured teaching qualification programme of Freie Universität Berlin via the Dahlem Center for Academic Teaching (DCAT).

Name	**Berlin Leadership Academy (BLA)**
Target Group	Professors from at least the W2 level and/ or experienced managers in science management
Responsible Party or Parties	Berlin University Alliance
Length of Programme	Course programme Individual courses can be taken
Short Description	A workshop programme for professors, which specifically encourages their leadership skills and makes psychological guidance useful in a university environment.
Further Information	fu-berlin.de/sites/dla/about-dla/index.html

Name	**DRS Workshops and Courses**
Target Group	Doctoral candidates (PreDoc)
Responsible Party or Parties	Dahlem Research School (DRS)
Length of Programme	Course programme Individual courses can be taken
Short Description	Dahlem Research School (DRS) is the central unit for early career researchers at Freie Universität Berlin. The workshops are assigned to different categories: • Getting started • Writing & Publishing • Speaking & Presenting • Research Integrity • Mental Health • Mini-Workshops • Funding & Managing Research • Career Development
Further Information	fu-berlin.de/sites/drs/index.html

Name	**Graduate Studies Support Programme**
Target Group	Doctoral candidates (PreDoc)
Responsible Party or Parties	Berlin University Alliance
Length of Programme	It consists of five major events, the so-called core events and a broad selection of other workshops ("satellites") as well as coaching and mentoring offers.
Short Description	Core events: Module 1: Kick Off Your Doctorate Module 2: (In)Credible Research Module 3: Writing Week(s) Module 4: Mental Health Days Module 5: Career Day
Further Information	berlin-university-alliance.de/en/commitments/promoting-talent/target-groups/graduate-studies-support-program/index.html

Name	Postdoc Academy
Target Group	Junior researchers (Postdoc)
Responsible Party or Parties	Berlin University Alliance
Length of Programme	Course programme Individual courses can be taken
Short Description	The Postdoc School aims to support postdocs in making informed and individualized career decisions. The diverse offerings include workshops, coaching and other formats, all designed to develop relevant skills and competencies for a successful scientific career. Topics such as research management, self-management, science communication, and career advancement are focused and delivered in a practical manner. In addition, the academy offers individual career counseling as part of our coaching sessions.
Further Information	berlin-university-alliance.de/en/commitments/promoting-talent/postdoc-academy/index.html

Name	EXSIST - Transfer of Research/ Business Startup Grant/ EXIST-Women
Target Group	Academic staff members of Freie Universität
Responsible Party or Parties	Profund Innovation
Length of Programme	1 semester
Short Description	When scientists, researchers, alumni, or students want to get their business idea onto the market through their own business, they often need subject-specific support and advice during the preparatory phase. Profund Innovation helps with finding appropriate financing options and aid programmes. The EXIST programme and the Berliner Startup Stipendium give members of the university community and alumni a chance to benefit from special air opportunities for start-up projects arising in academia and the research sector.
Further Information	fu-berlin.de/en/sites/profund/gruendungsservice/index.html

Name	fu:stat
Target Group	Academic staff members, students and employees of Freie Universität
Responsible Party or Parties	fu:stat
Length of Programme	Individual consulting and courses
Short Description	fu:stat offers statistical consulting and advice regarding statistical questions. The range of projects varies from short consultations to give guidance in statistical questions, to the supervision of empirical work (e.g. Bachelor-/Master-/Doctoral thesis), up to the realization of complex projects for companies. fu:stat also provides several statistical courses.
Further Information	stat.fu-berlin.de/en/index.html

Name	Toolbox Gender and Diversity
Target Group	All employees with responsibilities regarding teaching at the Freie Universität Berlin
Responsible Party or Parties	Office of the Chief Gender Equality Officer / Margherita von Brentano Center
Length of Programme	Starter Kits, workshops, online content
Short Description	The Toolbox Gender and Diversity offers a wide varity of rescources for employees with teaching responsibilities at the Freie Universität Berlin regarding all questions of Gender and Diversity. A special focus is on the use of sensitive imagery, didactical principles and guidelines to help the staff.
Further Information	genderdiversitylehre.fu-berlin.de/en/index.html

Appendix 9.1.1.c.: Online Didactic Center (German PDF printout)

Didaktik-Center

Fachbereich Veterinärmedizin
der Freien Universität Berlin

Einführung

Gemäß neuer Standard Operating Procedures der European Association of Establishments for Veterinary Education (EAEVE) sind zukünftig **alle Lehrenden sowie alle an der Lehre beteiligten Personen** der veterinärmedizinischen Ausbildungsstätten dazu verpflichtet, Didaktik-Schulungen sowie Auffrischungs-schulungen zu absolvieren.

Laut EAEVE müssen die Schulungen mind. folgende Themen umfassen:

Für alle Lehrenden und lehrunterstützendes Personal (insgesamt mindestens 16 Stunden)

- Code of conduct (Verhaltenskodex)
- ESEVT Day One Competences (D1C)
- GCP (good clinical practice)
- Good teaching and evaluation practices
- Learning and e-learning resources
- Teaching tools and use of digital tools education
- Practical & clinical teaching (basic)
- Practical & clinical teaching (advanced)
- Assessment tools
- Biosecurity

Zusätzlich für promovierte Lehrende (insgesamt mindestens 6 Stunden)

- Teaching methodologies
- Assessment methodologies
- Quality assurance (QA) loops in teaching and assessment

Einige dieser Schulungen werden am Fachbereich zur Onlinenutzung angeboten:

- Lehrqualifizierung nach EAEVE (Teil 1)

Alle absolvierten Schulungen müssen durch Teilnahmebescheinigungen oder Zertifikate nachgewiesen werden. Ihre Angaben zu den absolvierten Schulungen können Sie auf den nächsten Seiten machen und die entsprechenden Nachweise hochladen.

Wir danken Ihnen herzlich für Ihre Unterstützung!

Ihr Dekanat

Didaktik-Center

Didaktik-Center

Fachbereich Veterinärmedizin
der Freien Universität Berlin

Herzlich willkommen in Ihrem Didaktik-Center

zur Einführung ins Didaktik-

Mit den folgenden Angaben weisen Sie die von der EAEVE geforderten didaktischen Fortbildungen nach und behalten selbst den Überblick über Ihren Fortbildungsstatus.

Wie heißen Sie?

Anrede*) Vorname Nachname

*) Bitte wählen Sie die korrekte - wenn vorhanden akademische - Anrede

In welcher/en wissenschaftlichen Einrichtung/en arbeiten Sie

- ☐ WE01, Institut für Veterinär-Anatomie
- ☐ WE02, Institut für Veterinär-Physiologie
- ☐ WE03, Institut für Biochemie
- ☐ WE04, Institut für Tierernährung
- ☐ WE05, Institut für Virologie
- ☐ WE06, Institut für Immunologie
- ☐ WE07, Institut für Mikrobiologie und Tierseuchen
- ☐ WE08, Institut für Lebenmittelsicherheit und -hygiene
- ☐ WE10, Institut für Tier- und Umwelthygiene
- ☐ WE11, Institut für Tierschutz, Tierverhalten und Versuchstierkunde
- ☐ WE12, Institut für Tierpathologie
- ☐ WE13, Institut für Parasitologie und Tropenveterinärmedizin
- ☐ WE14, Institut für Pharmakologie und Toxikologie
- ☐ WE16, Institut für Veterinär-Epidemiologie und Biometrie
- ☐ WE17, Pferdeklinik
- ☐ WE18, Nutztierklinik
- ☐ WE19, Zentrum klinische Services
- ☐ WE20, Kleintierklinik

Sonstiges (bitte angeben):

Ihr aktueller Status

- ○ Senior academic staff
  Lehrkräfte mit Promotion (Dr. oder PhD)
- ○ Junior academic staff
  Lehrkräfte ohne Promotion (Doktoranden:innen und studentische Hilfskräfte)
- ○ Support staff
  Lehrunterstützendes Personal

aktuelle Lehrverpflichtung: ○ ja ○ nein
(bei Änderung des Status bitte aktualisieren und unten erneut 'Absenden' drücken)

Didaktik-Center von

Seite 1

Übersicht über die von Ihnen bisher absolvierten Fortbildungen

- ☐ Code of conduct (Verhaltens-/Ethikkodex) *)
- ☐ ESEVT Day One Competences (D1C) *)
- ☐ GCP (good clinical practice) *)
- ☐ Good teaching and evaluation practices
- ☐ Learning and e-learning resources
- ☐ Teaching tools and use of digital tools education
- ☐ Practical & clinical teaching (basic) *)
- ☐ Practical & clinical teaching (advanced) **)
- ☐ Assessment tools
- ☐ Biosecurity **)
- ☐ Sonstige

***) hier finden Sie unsere Didaktikfortbildung vom 'Tag der Lehre 2023'!**

****) Diese Themen werden im Rahmen "Tag der Lehre am Fachbereich Veterinärmedizin 2024" am Montag, den 12.02.2024 zwischen 14:00 und 17:00 Uhr vermittelt.**

wenn promoviert zusätzlich:

- ☐ Teaching methodologies
- ☐ Assessment methodologies
- ☐ Quality assurance (QA) loops in teaching and assessment

Fortbildungsstunden (gesamt): 0

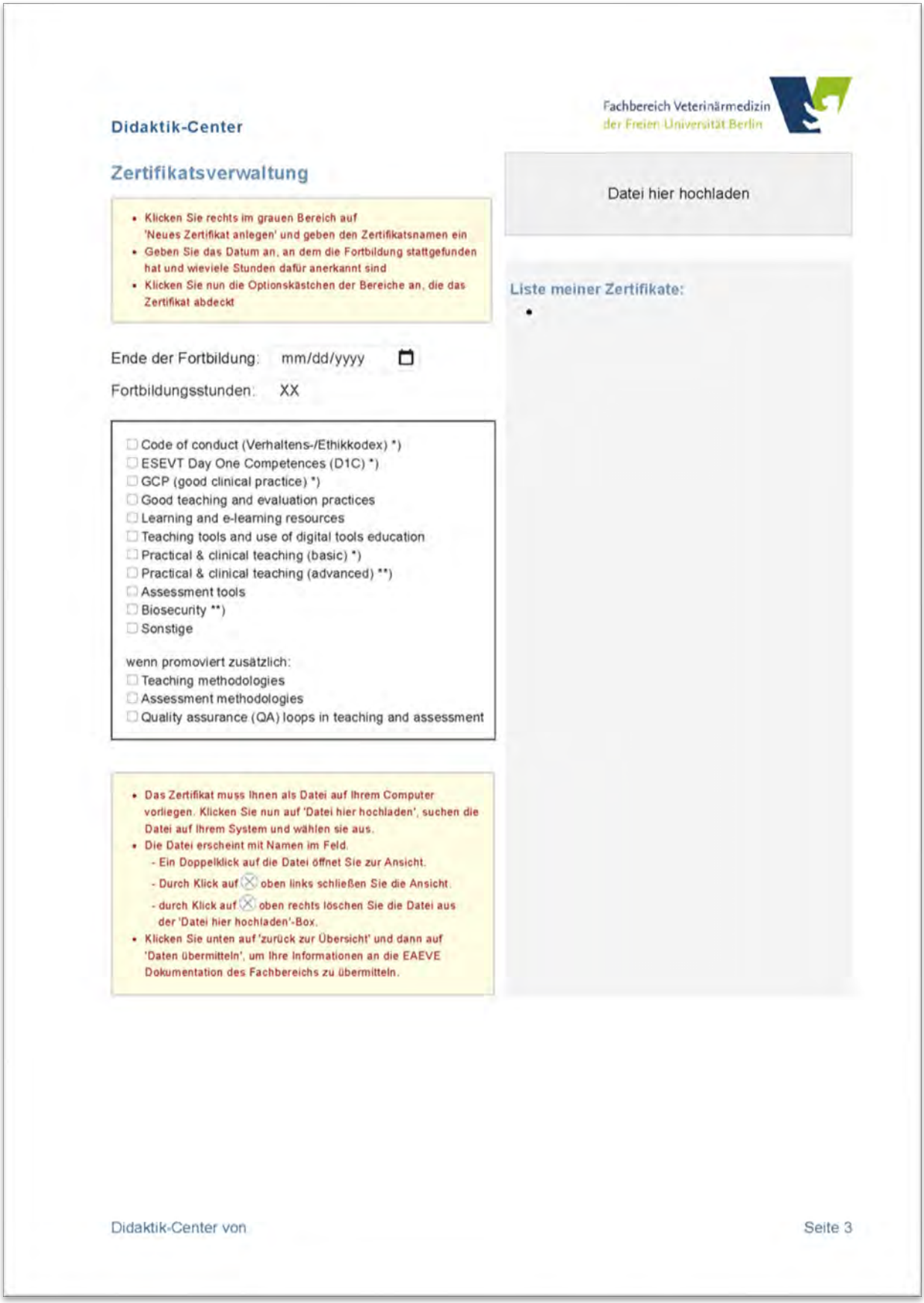
(Für Ihren Status sind mind. 16 Stunden erforderlich)

Letzte Fortbildung am:

(Es ist mindestens 1x jährlich eine Fortbildung zu besuchen)

Wenn Sie den Fachbereich verlassen, können Sie die Löschung Ihrer Einträge verlangen.
Klicken Sie hierzu auf die nachfolgende Option.

- ☐ Ich beantrage das Löschen der über das Didaktik-Center an den Fachbereich Veterinärmedizin von mir übergebenen Daten



Didaktik-Center

Fachbereich Veterinärmedizin
der Freien Universität Berlin

Zertifikatsverwaltung

- Klicken Sie rechts im grauen Bereich auf 'Neues Zertifikat anlegen' und geben den Zertifikatsnamen ein
- Geben Sie das Datum an, an dem die Fortbildung stattgefunden hat und wieviele Stunden dafür anerkannt sind
- Klicken Sie nun die Optionskästchen der Bereiche an, die das Zertifikat abdeckt

Ende der Fortbildung: mm/dd/yyyy

Fortbildungsstunden: XX

- ☐ Code of conduct (Verhaltens-/Ethikkodex) *)
- ☐ ESEVT Day One Competences (D1C) *)
- ☐ GCP (good clinical practice) *)
- ☐ Good teaching and evaluation practices
- ☐ Learning and e-learning resources
- ☐ Teaching tools and use of digital tools education
- ☐ Practical & clinical teaching (basic) *)
- ☐ Practical & clinical teaching (advanced) **)
- ☐ Assessment tools
- ☐ Biosecurity **)
- ☐ Sonstige

wenn promoviert zusätzlich:

- ☐ Teaching methodologies
- ☐ Assessment methodologies
- ☐ Quality assurance (QA) loops in teaching and assessment

- Das Zertifikat muss Ihnen als Datei auf Ihrem Computer vorliegen. Klicken Sie nun auf 'Datei hier hochladen', suchen die Datei auf Ihrem System und wählen sie aus.
- Die Datei erscheint mit Namen im Feld.
  - Ein Doppelklick auf die Datei öffnet Sie zur Ansicht.
  - Durch Klick auf ⊗ oben links schließen Sie die Ansicht.
  - durch Klick auf ⊗ oben rechts löschen Sie die Datei aus der 'Datei hier hochladen'-Box.
- Klicken Sie unten auf 'zurück zur Übersicht' und dann auf 'Daten übermitteln', um Ihre Informationen an die EAEVE Dokumentation des Fachbereichs zu übermitteln.

Datei hier hochladen

Liste meiner Zertifikate:

•

Didaktik-Center von

Seite 3

Appendix to 9.1.1.d.: Mandatory training for all teaching staff at the VEE

Academic training: The VEE follows a strategy where mandatory training is combined with supplementary offers from the University, the Berlin Leadership Academy (BLA), the Berlin University Alliance (BUA) and external sources. The VEE organises an annual "Day of Teaching", which is mandatory for all teaching and teaching support staff. In addition, the Dahlem Center For Academic Teaching (DCAT) at Freie Universität Berlin offers a structured teaching qualification programme (certificate programme)[7] as well as various courses on all aspects of university teaching and learning. Course certificates are uploaded in the VEE's online Didactic Center and training progress is monitored by the Dean's Office to be compliant with ESEVT SOP.

Quality management training: In partnership with Freie Universität Berlin, a video tutorial on "Quality Management in Teaching"[8] was established. In addition, a module on quality assurance is also amongst the online continuing education courses deposited in the online Didactic Center.

Work and fire safety, biosecurity and hygiene: New employees who work in laboratories and/or animal facilities receive safety instructions from their supervisors. Employees must sign an agreement to participate in the training, which is repeated annually. The same also applies to the respective hygiene precautions against infection and biological substances, as well as work and fire safety regulations and training. Further information can be found in Standard 4.9. The compliance with all mandatory instructions is monitored by the Work Safety Service (DAS) in a three-years cycle during their Eco-Management and Audit Scheme (EMAS) visitation of each institute and clinic. Freie Universität Berlin is EMAS-certified since 2021.

Animal welfare: The VEE further provides mandatory annual instructions in legislation and ethics related to animal experimentation (4 h/year) for all staff involved in experimentation and teaching using animals. Respective staff has to complement these instructions with additional continuing education to a total of 8 h/year. The compliance with the mandatory instructions is monitored by the animal care and use authority at LAGeSo Berlin.

Good Scientific Practice: According to the requirements of the main German funding organization (Deutsche Forschungsgemeinschaft DFG), Freie Universität Berlin has enforced a Statute for Safeguarding Good Scientific Practice which requires repeated instructions on Good Scinetific Practice for all students and early career scientists.

Veterinary continuing education: State veterinary chambers require that all registered veterinarians attend ≥20 h of continuing education per year (≥40 h for specialist veterinarians).

[7] A description of the programme can be found in Appendix to 9.1.1.a.
[8] See: https://www.vetmed.fu-berlin.de/studium/qualitaetssicherung/index.html

Appendix to 9.2.2.a.: Schematic Representation of the Recruitment Procedure

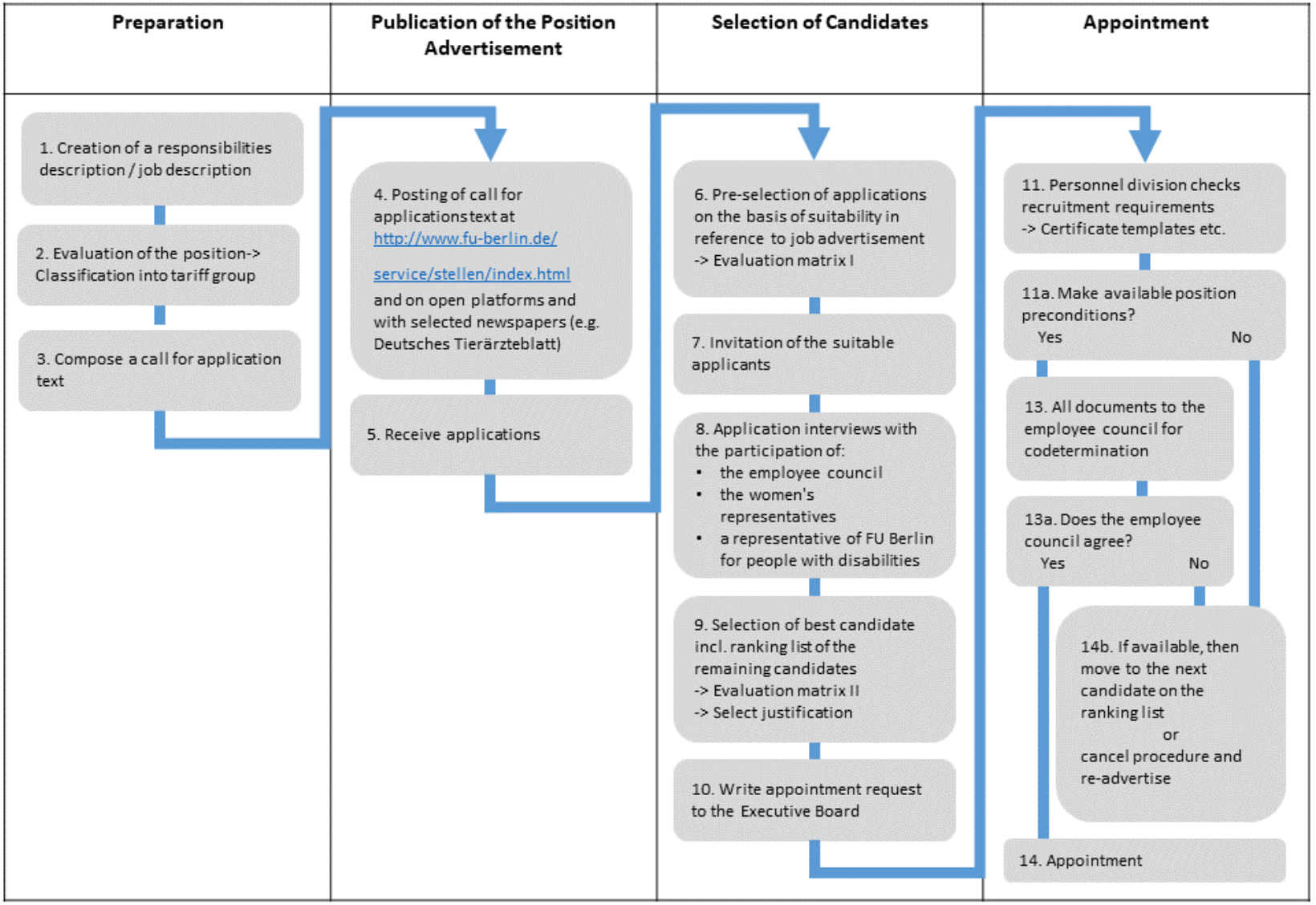
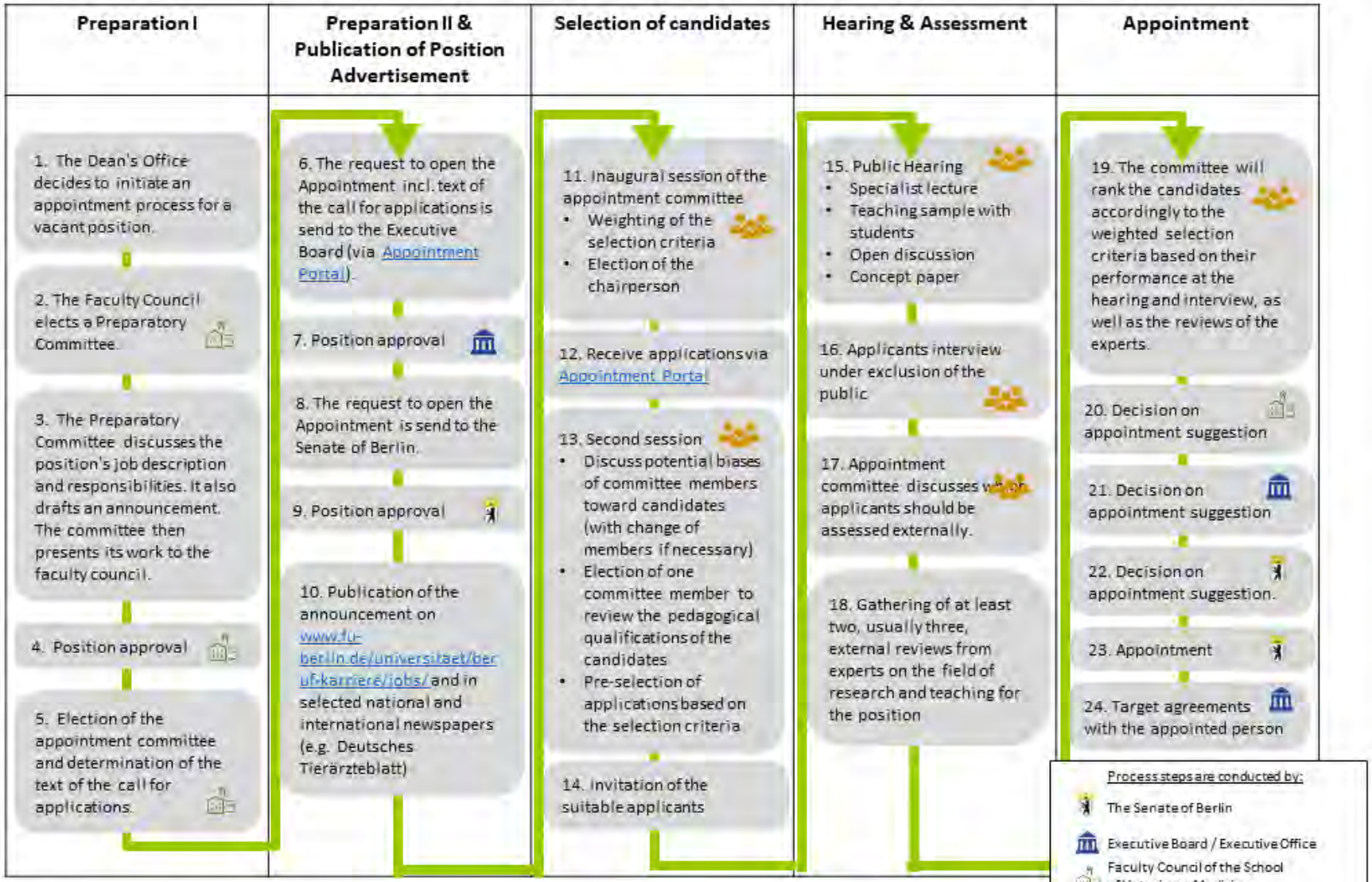


Figure: Schematic Representation of the Recruitment Procedure

Appendix to 9.2.2.b.: Schematic Representation of the Appointment Procedure



detailed description can be found in the appointments guidance at https://www.fu-berlin.de/sites/berufungen/informationen_intern/index.html ternal network]. On the composition of the appointments committee see Appendix to 1.1.5.: Profiles of the Commissions and Representatives.

Appendix to 9.4.1.: Advising Services for Staff Members at Freie Universität Berlin

Sport, prevention & further education

Center for Continuing Education	The Center for Continuing Education is a central facilities unit of Freie Universität Berlin. The education mission of the center - in the sence of lifelong learning - is directed at people in all phases of life that would like to continue their academic or professional training. The range of services covers a broad spectrum of formats for professional and cultural training. The Center offers over 1,000 different courses each year including job-related continued education, IT courses, language courses, health and courses for personnel development. fu-berlin.de/sites/weiterbildung/index.html
University Sports Center	The University Sports Center of Freie Universität Berlin offers, in addition to a very wide range of sports, workshops and sports trips, a differentiated programme as part of FUndament Gesundheit, as well as service and advising facilities for university members. Each semester the University Sports Center organises a comprehensive and high-quality range of courses in more than 120 sports and with up to 800 individual events each semester. hochschulsport.fu-berlin.de/

Re-entry, occupational health and safety

Operational Management Integration (BEM)	Freie Universität offers operational management integration (BEM) to all employees with repeated or lasting illnesses which persist for more than six weeks in a year. This is intended to overcome incapacity to work, prevent further bouts of illness and to safeguard jobs. As part of the control circuit, FUndament Gesundheit, a procedure suitable for employees of Freie Universität Berlin has been developed. As part of a voluntary discussion, the reasons for being unfit for work or unfit for service should be discussed. These can occur in the professional as well in the private environment. The aim is to find solutions and to agree upon measures, which should help employees so that they can be guided out of their illness situations. fu-berlin.de/sites/fundament-gesundheit/angebote/bem/index.html
Work Safety Service (DAS)	The Work Safety Service (DAS) acts in an advisory capacity as the university office for occupational health and safety for employees of Freie Universität Berlin. The DAS and the Occupational Health Advice Service work with interested parties, welfare services, officials responsible for safety, first-aiders and miscellaneous employees. Their tasks include the following: • Advising responsible supervisors and employers on occupational health and safety • Advising on the planning, designing and maintaining of operating systems • Advising on the acquisition of technical resources and the introduction of work procedures and working materials, the selection and testing of body protection, the design of workplaces, work processes, working environments and especially on questions pertaining to ergonomics, assessment of working conditions • Inspection of workplaces, notification of observed defects to the persons responsible and proposing means to eliminate shortcomings and working towards their implementation fu-berlin.de/sites/baas/index.html

Medical care & psychological counselling

Occupational Health Service (Betriebsärzte)	The Occupation Health Advice Service is tasked with the following: • Advising on all questions pertaining to medical work protection • Inspecting working areas • Occupational medical examinations • Preventing and analysing work-related illnesses • Organising and implementing occupational medical vaccination programmes • Organising first aid • Work-related medical training and information The Occupation Health Advice Service is a external service provided by the Charité Universitätsmedizin Berlin for the the Freie Universität Berlin as part of a longstanding cooperation between the Charité and her mother university. fu-berlin.de/en/einrichtungen/service/betriebsarzt/index.html
Psychotherapy - Diagnostics - Health promotion (Hochschul-ambulanz)	The University Outpatient Clinic offers stress management training, self-confidence training, and other physical and mental health promotion activities to interested individuals. In addition, the outpatient clinic offers psychotherapy (behavioral therapy) for people with mental disorders and/or mental symptoms accompanying physical illnesses. One focus is the treatment of anxiety disorders - especially social anxiety disorder - and depression. Treatment may be covered by health insurance upon request. ewi-psy.fu-berlin.de/psychologie/einrichtungen/hochschulambulanz/index.html
Center for Academic Advising and Psychological Counseling	The Psychological Counseling Service offers individual counseling, training courses, and workshops. In addition to students, employees of Freie Universität can also contact the counseling center. All psychotherapists have a license to practice or are in an advanced stage of psychotherapeutic training. They are bound to professional secrecy. .fu-berlin.de/en/sites/studienberatung/psychologische_beratung/index.html
Neuropsychological Consultation (Gedächtnis-Sprechstunde)	The neuropsychological consultation team will advise students and employees if they or their relatives have noticed a change in your perception, attention and/or memory functions. It is a specialized part oft he Fundamt Gesundheit. fu-berlin.de/sites/abt-1/stabsstellen/fundament-gesundheit/angebote/neuropsychologische_sprechstunde/index.html

Social counselling

Social Counseling (Sozialberatung) and Social contact persons (SozAP)	Social Counseling at Freie Universität is a voluntary and free service for all employees. Social Counseling is provided confidentially and in strict compliance with data protection regulations. The counseling service is based on the employee's existing need for help and/or support. This need is jointly identified during an initial personal meeting. The goal is to support employees who need help in a personal or work context. fu-berlin.de/sites/abt-1/stabsstellen/sozialberatung/index.html fu-berlin.de/sites/abt-1/stabsstellen/fundament-gesundheit/wegweiser/soziale-ansprechpartnerinnen/index.html
Crisis counseling for employees	If employees are experiencing feelings of loneliness, loss of control, excessive demands, helplessness and anxiety, they can contact the Crisis Counseling Service. The Crisis Counseling Service was established during the coronavirus pandemic.

	fu-berlin.de/sites/studienberatung/psychologische_beratung/krisenberatung.html
support.point	The psychologists of the support.points offer open consultation hours for students and employee with no prior registration. In an initial discussion, they identify the issue and develop initial solutions. If necessary, they refer their clients to other counselling centres inside and outside the university. fu-berlin.de/en/sites/mentalwellbeing/Support_Points/index.html

Addiction prevention and counselling

Peer Addiction Advice Service (Suchtberatung) Addiction Prevention Working Group (Arbeitskreis Suchtprävention)	Support is provided by two peer advisers to concerned and affected employees of Freie Universität. This support is also extended to the colleagues of the affected employees if they choose to seek support and advice. Trained colleagues attempt to find solutions for affected persons in personal discussions. On request, they can arrange contact with support facilities. The range of services is available for all employees of Freie Universität, who themselves have a problem with addiction, or are confronted with addiction problems in their family or peer group. fu-berlin.de/sites/abt-1/referate/1c/welcome-service/ansprechpersonen-servicestellen/gesundheit-vorsorge/suchtberatung.html fu-berlin.de/sites/abt-1/stabsstellen/fundament-gesundheit/angebote/suchtpraevention/index.html

Equality and compatibility of family and career

Dual Career & Family Service (Familienbüro) and Contact points for all aspects of care	The Dual Career & Family Service is available as a central contact and coordination centre for questions relating to families. The Family Service unit provides a large range of services, such as emergency childcare, holiday childcare, continuing education etc. Advising services include: • Working with child • Studying with child • Care • Dual career fu-berlin.de/sites/dcfam-service/index.html fu-berlin.de/sites/abt-1/stabsstellen/dcfam-service/pflege/index.html
Women's and Equal Opportunities Officer	The Women's and Equal Opportunities Officer Team advises and assists university board and central committees in the implementation of the federal gender equality mandate. The chief gender equality officer is elected by the female staff of the Freie Universität Berlin for a tenure of three years- fu-berlin.de/sites/frauenbeauftragte/index.html The decentralized women's and equal opportunities officers work towards creating equal opportunities for women in their facilities. Like their central counterparts there are elected for a tenture of three years by the female employees of the facility. https://www.vetmed.fu-berlin.de/einrichtungen/gremien-und-organe/koordinatoren_beauftragte/dezentr-frauen/dezentrale_frauenbeauftragte/index.html
Representation Agency for Persons with Disabilities	The Representation Agency for Persons with Disabilities promotes the integration of persons with disabilities into offices, it represents their interests in the workplace and provides them with advice and assistance. It ensures, for example, that legislation for the assistance of persons with disabilities is implemented. It proposes measures which serve those with disabilities, in particular those of a preventive nature, at the appropriate points. It receives suggestions and complaints from those with disabilities and works towards negotiation with the employer, if it appears justified.

	Elections for the Representation Service for Persons with Disabilities takes place every 4 years. fu-berlin.de/sites/sbv/index.html
Working Group on Sexualized Harassment, Discrimination, and Violence	The Standing Working Group on Sexualized Harassment, Discrimination, and Violence met for the first time in 2016. Its duties are defined in the Regulations on Sexual Harassment, Discrimination, and Violence at Freie Universität Berlin. It is the first point of contact for anyone seeking advice or further information on sexual harassment, discrimination, and violence. All inquiries will be treated with the utmost confidentiality. fu-berlin.de/en/sites/nein-heisst-nein/kontakt/index.html
Diversity and Antidiscrimi-nation Office Contact person of the VVE for diversity	The Diversity and Antidiscrimination Office supports and advises university management and other units within the university with regard to developing and achieving diversity goals, particularly on actions to dismantle barriers, fight discrimination, and promote a teaching, learning, and working environment at Freie Universität in which everyone can participate equally and feel that their contributions to the university are appreciated. The office's overarching goal is to ensure sustainable structural equity in the university. fu-berlin.de/diversity https://www.vetmed.fu-berlin.de/einrichtungen/gremien-und-organe/koordinatoren_beauftragte/ansprech-Diversity/index.html

Further points of contact

FUndament Gesundheit (BGM@FU – Occupational health management)	On objective of occupational health promotion is to make working conditions as beneficial to health as possible as well as to establish measures for improving the work environment and the motivation of employees at Freie Universität Berlin. Fields of activity: • Age-appropriate working and learning • Depression • Heath reports • Health day • Peer advising • Annual talks fu-berlin.de/sites/abt-1/stabsstellen/fundament-gesundheit/index.html
Staff development	In order to meet the demand for customized personnel development, each target group is supported by competent contact persons at the central level, in addition to the managers in the decentralized areas. fu-berlin.de/sites/abt-1/referate/1c/personalentwicklung/index.html

Interest Groups at Freie Universität

Employee Council: Dahlem	Employee representation of all employees at the department, with the exception of student employees. The Employee Council ensure compliance with important legislation relevant to employees. This includes, in particular, collective wage bargaining agreements, but also service agreements and laws. It should also ensure that integration and support in offices - particularly of persons with disabilities, women and foreigners - occur and that they are not put at a disadvantage. In addition, the Employee Council has a right of codetermination in personnel matters such as appointments, terminations, upgrading and downgrading. The Employee Council is elected every four years. fu-berlin.de/sites/prdahlem/index.html
Employee Council for Student Employees	The function and role of the Employee Council for Student Employees is to protect and enforce the rights of all student employees and to expand them within their remit. The Council is involved in calls for applications and

	recruitment, based on collaboration and codetermination rights. The Employee Council for Student Employees of Freie Universität Berlin is elected for a one-year term of office. fu-berlin.de/sites/prstudb/index.html
Staff Council for the Entire of Freie Universität Berlin	The Staff Council for the Entire of Freie Universität Berlin represents, in coordination with local staff councils, all employees of Freie Universität Berlin, including student employees. The Staff Council is responsible for all matters which pertain to all employees or more than one office. This is done in accordance with the Berlin employee representative laws (PersVG Berlin § 54). Interdepartmental affairs include e.g. IT procedures, which relate to at least two offices, occupational health and safety and continuing education for employees. The Staff Council is elected for a four-year term of office, as are the local staff councils. fu-berlin.de/sites/gpr/index.html
Youth and Trainee Council	The Youth and Trainee Council (JAV) of Freie Universität Berlin is tasked with applying existing laws and agreements relating to managing training. They contribute to changes which concern training and have a right of codetermination in recruiting processes, ongoing employment and termination. The election takes place every two years. fu-berlin.de/sites/jav/index.html

Appendix to 10.1.: Details of the VEE postgraduate programmes

Ph.D.-Programme "Biomedical Sciences"
Since 2008, approximately 15 to 20 % of all veterinary graduates with interest in an academic career join a formal Ph.D.-Programme "Biomedical Sciences" which is one 27 graduate schools withing the Dahlem Research School (DRS) of Freie Universität Berlin. The DRS and all of its subprogrammes are governed by the accreditation and quality control mechanisms of Freie Universität Berlin. The DRS Biomedical Sciences Programme is structured and organized similar to most higher US Ph.D.-programmes, including a 3-year curriculum, a mentoring group of 3 professors per student that meets the graduate student in 6 months periods, a curriculum of 180 ECTS credit points and the requirement of two first-authorship original research publications in international, peer reviewed scientific journals. Focused training occurs for each participant in more general aspects (research propedeutics, good scientific practice, statistics, how to write and publish scientific papers etc.) during a two weeks spring schools which takes place annually in March.
Graduate students are either officially enrolled in an externally funded research network (e.g. GRK 2046) at the VEE and receive an appropriate salary through that funding line or are financed by other third-party projects. In general, the tutor is responsible for an adequate salary of each graduate student enrolled in the DRS. Quality measures such as frequent assessments whether all requirements of the curriculum are met, student statistics, exchange with other programmes, analysis of drop outs etc. are organized by the coordinating office of the programme under the guidance of the DRS. Currently, there are 150 graduate students (63% female) from 28 countries enroled.

In addition to the "Biomedical Sciences" DRS programme, several other graduate schools and structured graduate education programmes exist in the Berlin and Potsdam region, e.g., the ZIBI Graduate School for Infection Biology and Immunity of the Humboldt University of Berlin and the International Graduate Program Medical Neurosciences of the Charité University Medicine, the Berlin Medical School. Student exchanges, transfers between programmes and mutual recognition of training are governed by the DRS regulations on our side and respective documents of the other graduate schools.

Dr. med. vet. and Dr. rer. nat. Doctoral programme
Approximately 60% of all State certified veterinarians primarily aiming at a career as future practitioners enroll in our "Dr. med. vet." programme which is the traditional German graduate student academic training structure, paralleling similar structures in human medicine, civil engineering and virtually all other academic fields for over 100 years. This programme is less structured in terms of duration (2 to 5 years), scientific output (no / less requirements in terms of peer-reviewed publications but with a mandatory inaugural thesis), mentoring (only a single tutor) and curriculum. It offers much more flexibility for all involved such as the option of a combination with part time work in the clinics or a private veterinary practice. Despite less formal requirements in terms of ETCS credits, several requirements implemented by the DRS also apply for students within the Dr. med. vet. programme, including training in good scientific practice, statistics and literature retrieval.
Students of both the PhD and the Dr. med. vet. programmes and their tutors and mentors sign a mentoring contract that lays down the cornerstones of the obligations of all parties involved, e.g., periodic project discussions, the allocation of lab and office space, measures in case of conflicts or disagreements and good scientific / laboratory practices.
According to the rules for obtaining a doctorate degree in veterinary medicine, it is possible in exceptional cases start working on a dissertation topic during undergraduate studies. However, this

scenario is criticized as in such cases students might concentrate on this particular discipline already during the undergraduate training which in the end might hinder their broader professional education. On the other hand, such an early focusing on scientific work may motivate exceptionally talented students for a research career and gives students the privilege of having insight into the work and structure of a research institution, which may also be regarded as part of valuable academic training. At present, approx. 4% of the students take advantage of this option which may actually represent a reasonable number of exceptionally motivated and talented students.
Since 2024, the VEE has also offered the possibility of obtaining the degree of Dr. rer. nat. for graduates of life science courses. The corresponding doctoral regulations are based on the firmly established Dr. med. vet. regulations, which also applies to the requirements to be fulfilled by doctoral students (see above) during the curriculum, but also when submitting the dissertation, as well as the procedure for the written and oral examination (*rigorosum*). High demand from lecturers for this opportunity to study for a Dr. rer. nat. suggests a successful start in 2024.

European College Diplomate Training
A large number of specialization subjects under the administrative and regulatory roof of the European Board of Veterinary Specialization (EBVS) are established in the VEE and offered through College-certified training centers, headed by Diplomates of the respective Colleges. Programmes include residency training in small animal and equine surgery, small animal and equine medicine, animal nutrition, pathology, microbiology, veterinary publish health and other topics (see Table 10.1.1. in the core SER document). The Diplomate status, whenever possible and appropriate, is a prerequisite in the advertisement and appointment of leading VEE positions.

National Certificates of Veterinary Specialization (Fachtierarztprogramm)
Similar to the EBVS-guided European Diplomate programmes, the certified and quality-controlled specialization into a large number of veterinary disciplines has been implemented for many decades in Germany. These specialization programmes are implemented, governed and controlled by the State Veterinary Chambers by law. The chambers revise their programmes periodically and make all details of programmes and requirements public[9]. The duration of programmes comprises of 4 or 5 years and disciplines include a wide range from small animal surgery to experimental animals, bee medicine and fish medicine. Certification is granted upon successful passing of a final examination and continuing education is mandatory with 20 hrs per year and field of specialization. Failure to comply with continued education rules may lead to the deprivation of the specialist status. At present, approx. 30% of veterinarians throughout Germany hold such a certificate of specialization with a strong trend towards increasing numbers. The VEE is not legally involved in this programme, however, virtually all clinics and institutes are recognized training centers for these programmes. In addition, VEE members are heavily involved in the training and examination procedures, with the veterinary establishments being the largest and most important training centers of this programme throughout the country.

[9] http://www.tieraerztekammer-berlin.de/kammerrecht/10-weiterbildungsordnung.html

Appendix to Table 10.1.1.: List of the major funded research programmes in the VEE which were ongoing during the last full academic year prior the Visitation (2023)

Scientific topics:	grant/year (€)	Duration (Yrs)
1. Targeting heat stress resilience in poultry using genomic selection and local plant-bioactive lipid compounds in Sub-Saharan West Africa (HeatRes)	55,922	1
2. Single or multiple anti-doping rule violations? Detection windows of long-term metabolites after multiple dose administration of Oral Turinabol	25,000	1
3. Lipid supplementation of high-grain diets: Effects on short-chain fatty acids absorption, epithelial permeability, and fatty acids composition of the ruminal epithelium of sheep	9,600	1.5
4. Spatiotemporal characterization of myeloid cell phenotypes and functions during bone healing by longitudinal intravital microscopic analysis (P14, SFB 1444, DFG)	57,000	4
5. locomotion of parasitic nematodes in the intestine: movement in the viscoelastic mucus linked to the metabolic activity of the nematodes (SPP2332, NI1167/7-1, DFG)	59,300	3
6. phenotypic and functional analyses of immune cells in severe cases of COVID-19 (NI1167/5-1, DFG)	13,000	3
7. spatio-temporal dynamics of calcium signalling and metabolism in germinal centre B cells (FOR6550, NI1167/9-1, DFG)	65,000	4
8. investigation of T-cell-based destruction of tumour cells in the bone marrow in models of multiple myeloma (Einstein-Foundation, together with Charité)	20,000	3
9. functional and molecular biological characterisation of the epithelial barrier of the follicle-associated epithelium of porcine Peyer's patches (AM141-11/2, DFG)	92,710	3
10. influence of phytochemicals on the gastric barrier of pigs (H. Wilhelm Schaumann Foundation)	16,800	2
11. Establishing the role of SFRP1 in metastasis formation in canine patients with mammary tumours	79,943	3
12. Interaction of abiotic and biotic stressors, as well as food limitation, on bee health and development of young colonies in the field.	42,000	1
13. LactoSperm	94,030	1
14. Bee Coordination Centre	127,066	2
15. Nutribee	52,000	2
16. „Intrauterine Application of Lactobacillus buchneri to improve the fertility of dairy cows	153,000	4
17. Maximization of the fertility rate of bull sperma by using probiotic lactobacillus strains	94,000	2

18. consequences of an Ascaris - Salmonella co-infection on macrophage functions and the anti-Salmonella antibody response of the pig **19. macrophage functions and the anti-Salmonella antibody response of the pig** **pig (HA 2542/11-2)**	119,191	3
20. SPP Physics of Parasitism - Locomotion of parasitic nematodes in the intestine: movement in viscoelastic mucus linked to metabolic activity of nematodes (HA 2542/12-1)	75,630	3
21. Physical principles of parasite-host interactions in Giardia muris infections (DFG SPP 2332; (RA 2544/1-1)	78,983	3
22. Research Training Group (GRK) 2046/2 (Budget for the entire RTG2046)	1,318,100	4.5
23. of which budget for 3 PhD students of the Institute of Immunology	263,620	
24. RTG 2046/ Speaker budget	97,600	3
25. Einstein-Doctoral programme (via RTG 2046)	100,000	3
26. HKP Mon	184,000	3
27. IdeC-Strep	96,500	4
28. SPP 2225 EXIT	64,000	3
29. Endo-Strep	84,500	3
30. STREP-KARD	104,750	3
31. Strep canis TraDIS / TraDIS Strep	47,000	3
32. SFB 1449/1-TP B05 / Mukus Mikrobiota	59,900	4
33. ImproveAST	120,000	3
34. Macrolide resistance in Mannheimia and Pasteurella DFG SCHW382/17-1	96,700	3
35. eSchulTS2: Development of eLearning training materials for animal welfare of cattle and pigs during ttansport and slaughter	39,169	3.5
36. KontRed: Reduction of microbial contamination in the pig slaughter process	35,878	3.5
37. ViKoMiSch: Assessment of cleanlinessof pigs with different schemes and micorbiological investigartions and comparisons	23,942	1.25
38. HOMAMR: Restrospective investigation of homeopatic treatmnets of turkeys	94,820	1.5
39. Kontred-reduce microbiological contamination along the slaughter line	200	4
40. Magniflex- screening of infectious diseases and AMR in poultry	60	3
41. ENVIRE: Interventions to control the dynamics of antimicrobial resistance from chickens through the environment	50,000	3

42. CORSAir: Virucidal effects of UVC radiation on SARS-CoV-2 in aerosols	50,000	2
43. KontRed: Treatment of process water and water-borne decontamination at slaughter	50,000	4
44. ZukunftLaWiBau: „Development of pioneering concepts for agricultural construction with wood - from planning to deconstruction“	50,000	3
45. DFG Exzellenzcluster Science of Iintelligence (SCIoI) loc box 2.0 2023-2025	85,000	3
46. DFG Exzellenzcluster Science of Iintelligence (SCIoI) big data 2022-2025	119,515	3
47. DFG Exzellenzcluster Science of Iintelligence (SCIoI) social interaction 2021-2024	86,266	3
48. DFG Exzellenzcluster Science of Iintelligence (SCIoI) lock box 1.0 2019-2023	102,897	3
49. BMEL Hores Watch (2022-2027)	72,014	5
50. Einstein Foundation EC3R (2020-2024)	68,375	4
51. BLE eSchulTS (2020-2023)	48,620	3
52. Central innovation programmeme for SMEs of the Federal Ministry of Economics and Climate Protection of the Federal Republic of Germany (BMWi) Farm4.net-Refinemon (2020-2023)	51,311	3
53. UZH Federal Food Safety and Veterinary Office FSVO (2021-2024)	65,363	2
54. Experimental pneumology (German Research Council Grant SFB-TR84, Z01b))	90,000	13
55. Einstein Center for the Reduction, Refinement and Replacement of Animal Experiments (EC3R by the Berlin Einstein Foundation)	20,000	6
56. Immunopathogenesis of Sarcocystis calchasi infection in pigeons (German Research Council Grant GR1491-6-3)	15,000	3
57. DAAD-Exchange programme with Kagoshima Unversity	9,000	3
58. DFG-Research grant, AI in Histopathology	67,000	3
59. DFG-Research grant, Canine mammary tumor molecular oncology	17,000	3
60. DFG-Research grant, Chloride Channel Regulators, Calcium Activated (CLCA) Proteins in Equine Asthma - Mechanistic Relevance as Immunomodulators and Potential Mucus Biomarkers?	104,733	3
61. IBB Business Team GmbH, EA-Biomarker	140,000	1
62. Tungiasis in East Africa	27,500	3
63. Anthelmintic resistance in Mozambique and beta-tubulin polymorphisms in Haemonchus	11,586	3
64. Epidemiology of small strongyles in foals and effect on microbiota	60,000	4.5
65. Xenobiotic metabolism and anthelmintic resistance	60,000	4.5
66. Macrocyclic lactone resistance in Parascaris spp.	15,000	3

67. Epidemiology of large and small strongyles in German horses	18,600	3
68. Drug screening with industry partner	95,000	3
69. BoLA-I haplotypes in African cattle breeds and Theileria parva vaccine development	111,905	3
70. Tick-borne Zoonoses	162,555	6
71. Boosting Uganda's Investments in Livestock Development	13,200	5
72. Pharmacovigilance programme	51,000	3
73. HKP-Mon (monitoring of anitbiotics)	48,000	3
74. Neurogenesis in infection-induced epilepsy (since Jan 2023)	97,617	3
75. Infect Neurodev (since Aug 2023)	64,500	2
76. Development of target group-specific e-learning modules to improve animal welfare during transport and slaughter of cattle and pigs (eSchulTS2	100,000	3.5
77. ENVIRE: Combating the spread of antimicrobial resistance in broilers via the environment to humans	108,000	2
78. HKP-Mon – Recording of antibiotic use and antibiotic resistance in dogs, cats and horses with associated evaluation system	170,000	2
79. Individualized mastitis risk assesment in dairy farming using sensors, digitalization and artificial intelligence (medicow)	91,000	3
80. Repr 0|1: Integration of sensor data into an innovative management system based on HERDEplus® to improve fertility in German dairy cows	64,000	2
81. Proximal interphalangeal joint arthrodesis	35,000	
82. Testing of a cooling device for the distal limb	30,000	2
83. Klauenfitnet	52,000	3
84. CalfHealth	30,000	1
85. HE Kalb	185,000	4
86. navel project	20,000	3
87. Module for replacement heifers	142,267.96	3
Total	**7,386,738**	

Appendix to Table 10.3.4.: Number of attendees to continuing education courses provided by the VEE

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
BTG	Veterinary training, 10 each year (Hybrid format)	1,235	1,847	1,508	**1,530**
1	"Anatomy of the locomotor system of dog and horse" for animal physical therapists		6		**6**
3	Annual Meeting of the Society of Nutrition Physiology (GfE)	285	283	257	**275**
3	The Berlin disease mobile - training unit for official veterinarians and beekeepers			50	**50**
3	Bee rounds for official veterinarians at Düppel (Berliner Bienenrunde 2021)		62		**62**
3	public beekeeper course	230	220	200	**216.67**
3	alternative Varroa treatment course	120			**120**
4	Dahlem Dietetics seminar: Online seminar seminar: Young dog nutrition, options of ration design and common feeding mistakes			30	**30**
4	Dahlem Dietetics seminar: Heart disease in dogs and cats seminar: What role do grain-free food, taurine, n-3 fatty acids and other nutritional factors play?		80		**80**
4	Dahlem Dietetics seminar: Microbiome as the key to animal health in dogs and cats?		50		**50**
4	Dahlem Dietetics seminar: Mistakes in Dog and Cat Feeding - Knowledge, Belief, Superstition	50			**50**
4	Dahlem Dietetics seminar: Focus on the cat seminar: Old insights and new knowledge on nutrition	50			**50**
4	Dahlem dietetics seminar: Dietetics for urinary stones in dogs and cats - current studies, feeding tips and case studies	50			**50**
4	Digestive Physiology in Pigs, Steering committee		350		**350**
4	ISEP: 6. und 7. internationales EAAP-Symposium über Energie- und Proteinstoffwechsel und Ernährung (EAAP), Steering comittee		300		**300**
4	FoodBerlin webinar series „Food for the Future“, Pathways towards a Sustainable Global Food System; Hermann Lotze-Campen, Potsdam Institute for Climate Impact Research		40		**40**
4	FoodBerlin webinar series „Food for the Future“, How to (not) groom our guts – Modulating the microbiome for intestinal health; Hauke Smidt, Wageningen University and Research, NL		40		**40**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
4	FoodBerlin webinar series „Food for the Future“, Novel food production and processing for more sustainable food systems; Alexander Mathys, ETH Zürich, CH			40	**40**
4	FoodBerlin webinar series „Food for the Future“, Food Policy 2023: Signs for Hope?; Marion Nestle, New York University, USA			40	**40**
4	FoodBerlin Microbiome Network meeting	80	80		**80**
4	DVG Expert Group Animal Nutrition, conference organisation	30	30	30	**30**
4	ESVCN/ECVCN Nutrition Seminar for PhD students, residents and postdocs (weekly)	20	20		**20**
4	ESVCN/ECVCN conference organisation (steering group)	320	320		**320**
5	Berlin Seminar for Resistance Research - Speaker Prof. Dr. Manfred Marschall on "Antivirals"		30		**30**
5	Berlin Seminar for Resistance Research - Speaker Prof Dr. Ton Schat on "MDV Impfstoffe"		35		**35**
5	Berlin Seminar for Resistance Research - Speaker Prof Dr. Moriah Szoara on "Virus Evolution"	30			**30**
5	Berlin Seminar for Resistance Research - Speaker Prof. Dr. Louis Flamand on "Virus Integration"	35			**35**
6	Berlin Parasitology Seminar Series (BPS); 6-8 times each year	251	246	371	**289.33**
6	Role Models in Infection Biology; several times each year	42	135	33	**70**
6	Parasite Infections Lecture Series (PILS): Molecular, immunological and wildlife aspects; 17 times	0	436	0	**145.33**
6	Berlin Seminar for Resistance Research (BSfRR); 4-6 times each year	81	85	0	**55.33**
6	Applied Flow Cytometry	5	5	5	**5**
6	Workshop "Wildlife" at DGP conference	0	0	19	**6.33**
6	Workshop "Liver: A Gatekeeper for parasite invasion" at DGP conference	42	0	0	**14**
6	Workshops "GSP" and "Career Options" at GRK 2046 Retreat	16			**16**
6	PhD Symposium "Parasite Infections"	17	15	0	**10.67**
6	Workshop Afrika "Field work"	18	0	0	**6**
7	Lecture series on "Resistances in Veterinary Medicine"	16	22	16	**18**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Transfer of (multi)resistant bacteria between pet animals and their owners"		60		**60**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Antimicrobial susceptibility testing of bacteria - methodology and applications"		60		**60**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Antimicrobial Resistance: origins, mechanisms of resistance, transmission of resistance between bacteria"		60		**60**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Extended Spectrum β Lactamase (ESBL)-Producing Bacteria and ESBL-Carrying Plasmids		60		**60**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Livestock-associated MRSA solates and their antimicrobial resistance genes"		60		**60**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "Mobile oxazolidinone resistance genes among bacteria from humans, animals and the environment"		60		**60**
7	online-Seminar (post-docs Federal University of Agriculture, Abeokuta, Nigeria): Seminar on "How to use a CLSI standard"		60		**60**
7	DRS lecture on "Antimicrobial susceptibility testing of bacteria - methodology and applications"	42	40	41	**41**
7	DRS Lecture on "Antimicrobial Resistance: origins, mechanisms of resistance, transmission of resistance between bacteria"	42	40	41	**41**
7	DRS 5-Days "Hands-on"-Workshop on "Antimicrobial susceptibility testing"	10	9		**9.5**
7	UNA Europa_DAMR lectures: Lecture on "Antimicrobial Resistance: origins, mechanisms of resistance, transmission of resistance between bacteria"	79	28		**53.5**
7	Spring Symposium of the Academy of Animal Health: Antimicrobial Resistance – Basics and Innovative Research Concepts		150		**150**
7	TZR-Opening Symposium: Anti-infective resistances in animal pathogens: Causes, significance and approaches to solutions		200		**200**
7	DVG Biannual Meeting of the Division "Bacteriology and Mycology"	140			**140**
7	Spring Symposium of the Academy of Animal Health: AMR - Globales oder lokales Problem?	150			**150**
7	Annual Congress of the FAO RCs AMR: Macrolide resistance in bovine respiratory tract pathogens	85			**85**
7	Anti-infective strategies for the future: Genetics of mobile oxazolidinone resistance genes among bacteria from humans and animals	100			**100**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
7	French-German Summerschool: Antimicrobial Resistance: origins, mechanisms of resistance, transmission of resistance between bacteria	20			**20**
7	FLI Junior Scientist Symposium: Transfer, co-selection and persistence of antimicrobial resistance genes among bacteria	80			**80**
7	DVG Vet-Congress: Antimicrobial susceptibility testing: important information for practice	2,400			**2,400**
7	DVG Vet-Congress: New information on susceptibility testing of bacteria from animals from the Clinical and Laboratory Standards Institute	2,400			**2,400**
7	1. Düppeler Infektions- und Resistenztage: Antimicrobial resistance of selected bacterial pathogens of pigs	60			**60**
7	Düppeler Gesundheitstalks: Antibiotic resistance - a problem for humans, animals and the environment: information for practitioners	45			**45**
7	63. Congress of the German Society for Pneumology and Respiratory Medicine: Bacterial zoonoses	1,700			**1,700**
7	9th Symposium on Antimicrobial Resistance in Animals and the Environment (ARAE): Genomic diversity of porcine LA-MRSA CC398 isolates collected in the German national resistance monitoring programme GERM-Vet between 2007 and 2019	160			**160**
7	MRE-Net Multi-resistant pathogens, outbreak management and One Health: Multi-resistant pathogens in the One Health context	220			**220**
7	China Agricultural University, Beijing: Antimicrobial Susceptibility Testing in Veterinary Medicine: Performance, Interpretation of Results, Best Practices and Pitfalls	60			**60**
7	Henan Agricultural University, Zhengzhou: Antimicrobial Susceptibility Testing in Veterinary Medicine: Performance, Interpretation of Results, Best Practices and Pitfalls	75			**75**
7	Shanghai Veterinary Research Institute: Antimicrobial Resistance of Selected Bacterial Pathogens from Pigs and Cattle	80			**80**
7	Sanya Institute of China Agricultural University, Hainan: Antimicrobial Resistance of Selected Bacterial Pathogens from Pigs and Cattle	140			**140**
7	Antimicrobial Resistance Working Group	25			**25**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
7	Visiting students and scientists from Natinal University of San Marcos, Lima, Peru: General Aspects of Antimicrobial Resistance	15			**15**
7	Visiting students and scientists from Natinal University of San Marcos, Lima, Peru: Antimicrobial Resistance in the One Health Context	15			**15**
7	China Agricultural University, Beijing: CARPET - Chinese Antimicrobial Resistance Moitoring of Bacteria from Pets	45			**45**
7	Joint One Health Workshop (Federal Ministry of Health/Federal Ministry of Food and Agriculture	49			**49**
8	Campylobacter, Arcobacter & Related Organisms (CARO)	110			**110**
8, 11, 16, 10	Specialist conference for meat and poultry meat hygiene	510	445	345	**433.33**
8	Berlin „Veterinary Public Health Meetings" (4-times per year)	630	850	460	**646.67**
8	DVG specialist group "Food Safety and Consumer Protection"	570	540		**555**
8,10	Seminar on Update on control measures and international regulations for pathogens in poultry production	60			**60**
8	RIBMINS WG2/WG3 Virtual Training School: Farm and abattoir interventions in a risk-based meat safety assurance system		50		**50**
8	RIBMINS WG2/WG3 Virtual Training School: Risk-based Meat Safety Assurance Systems focusing on risk categorisation of farms and abattoirs	50			**50**
10	DVG specialist group conference “Animal Hygiene and Environmental Health”, Berlin 2022		40		**40**
10	ISAH Congress 2022, Berlin 05.-07. October 2022		226		**226**
8, 10	Seminar on “Update on control measures and international regulations for pathogens in poultry production”, Veterinary Public Health and Food Safety Centre for Asia Pacific, Chiang Mai University, Thailand, 26 August 2022.		100		**100**
8,10	Postgraduate MSc Programme CMU (Chiang Mai University)	10	10	10	**10**
10	DRS course: Introduction to Molecular Cloning		6		**6**
11	Training on new regulations in animal welfare laws and laboratory animal welfare regulations	255	251	253	**253**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
11	Training for veterinarians qualifying to become officer for animal welfare. Training catalogue in keeping with animal protection laws appendices 1 and 2. Course 1	40	91		**65.5**
11	Training for veterinarians qualifying to become officer for animal welfare. Training catalogue in keeping with animal protection laws appendices 1 and 2. Course 2	40	82	83	**68.33**
11	Seminar on laboratory animal science and animal experiments together with BfR, Charité and GV-SOLAS	450	300	300	**350**
11	Laboratory animal science course for doctoral students. Module A, fundamentals course, for right to participate in animal experiments, in keeping with animal protection laws appendices 1 and 2	32	29	38	**33**
11	Laboratory animal science course for doctoral students. Module B, advanced course, which, along with module A, fulfils the requirements set out by FELASA	14	21	14	**16.33**
11	IGTP Congress Berlin 2023	500			**500**
11	3R Online-Seminar „Alternatives to animal use in research and education – Refine, Reduce & Replace“	1,500	2,162	1,096	**1,586**
11	Colloquium for veterinarians in further training to become a specialist in laboratory animal science	10	10		**10**
11	Colloquium for veterinarians in further training to become a specialist veterinarian for animal welfare	6	6		**6**
11	EC3R Panel discussion "Can animal experiments be ethically justified?"	290			**290**
11	DVG Symposium on Laboratory Animal Sciences at Vet-Congress Berlin	50		50	**50**
11	Scientific Committee of the GV-SOLAS Congress Mainz	1,100			**1,100**
11	Ethological Society Meeting e.V. 2023 together with BfR	120			**120**
11	Scientific Board EUSAAT Congress	260			**260**
12	Advanced training for veterinarians to qualify as animal welfare officers	52	68	65	**61.67**
12	Master course Small Animal Science: Oncocytology	30			**30**
12	DVG Pathology section seminar: Ophthopathology		330		**330**
12	AFIP/JPC Wednesday Slide Conferences	10	9	9	**9.33**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
12	Journal Club „Diagnostic Veterinary Pathology"	10	9	9	**9.33**
12	Residency Training as a certified training center for the Diplomate in Pathology in EBVS	8	8	8	**8**
12	German Specialist in Animal Pathology Program	10	10	10	**10**
13	Opening Seminar Veterinary Center for Resistance Research	180			**180**
13	14th international symposium on ticks and tick-borne diseases			250	**250**
13	15th international symposium on ticks and tick-borne diseases	230			**230**
13	Conference for DVG specialist group "Parasitology and Parasitic Diseases"		240		**240**
13	Parasitology Colloquium	20	20	20	**20**
13	Good scientific practice/research ethics	51	90	80	**73.67**
13	Virtual Event of the Association of Institutions for Tropical Veterinary Medicine (AITVM) and the Society for Tropical Veterinary Medicine (STVM): 'The impact of COVID-19 on veterinary medicine'		179		**179**
14	VetPharm Syposium (alternating locations, oral presentations and posters)	80	80		**80**
14	DVG Vet Congress: The new regulations on veterinary medicinal products; seminar		20		**20**
14	The new regulations on veterinary medicinal products; online seminar, advertised on facebook, no ATF, free of charge		50		**50**
14	DVG Vet Congres: What alternatives to antibiotics exist?			100	**100**
14	Leipziger Tierärztekongress: Pharmacology of itch			300	**300**
14	BPT seminar (online): Use of antibiotics and antiseptics in wounds		300		**300**
14	Leipziger Tierärztekongress: Pharmacological peculiarities in the cat		300		**300**
14	Leipziger Tierärztekongress: antibody therapy for inflammatory disorders		350		**350**
14	Erfurter Themetage: Sense and non-sense of angtibiotic treatment of gastro-intertinal diseaeses	250			**250**
14	DVG Vet Congres: Bacteriophages - Hype or Hope?	200			**200**
15	Spring Conference of the German Branch of WPSA	120			**120**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
16	Statistics refresher courses (4-6 * 2.5 day courses for graduate students and young researchers)	67	82	145	**98**
16	Data management with Excel (3hr courses for graduate students and young researchers)			35	**35**
16	Biostatistics Colloquium (12 * 2 hr seminar series for Berlin statisticians in winter semester)	420	450	380	**416.67**
16	ECVPH Resident Workshops on Animal Health Economics		22		**22**
16	ECVPH Resident Workshop: Monitoring and surveillance approaches in animal populations and food-production chains	20			**20**
16	ECVPH Resident Workshop: Risk Factor Models	20			**20**
16	ECVPH Conference and AGM: Veterinary public health challenges at the farm animal – wildlife – environment interface	170			**170**
16	DRS Epidemiology Spring School (5 day course for PhD students)	40	28	21	**29.67**
16	Design and analysis of questionnaire-based data (4 day course for state veterinarians)	17	25		**21**
16	COST HARMONY Network workshop: Bayesian latent class diagnostic test and prevalence estimation workshop		40		**40**
17	Clinic training programme for residents: internal medicine, surgery and internal and specialist veterinarian training in equine medicine	22	22	22	**22**
17	Master's degree programme in equine medicine module	22	22	22	**22**
17	Master of Equine Science: Practice Management			31	**31**
17	Master of Equine Science: Scientific basic tools (Literature search, Scientific writing, Statistics)			22	**22**
17	Master of Equine Science: Husbandry of horses			42	**42**
17	Master of Equine Science: Metabolic disorders			31	**31**
17	Master of Equine Science: Gastrointestinal disorders I			25	**25**
17	Master of Equine Science: Orthopaedic disorders I			38	**38**
17	Master of Equine Science: Orthopaedic disorders III			40	**40**
17	Master of Equine Science: Gastrointestinal disorders II			34	**34**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
17	Master of Equine Science: Skin and Respiratory disorders I		39		**39**
17	Master of Equine Science: Ophthalmology		46		**46**
17	Master of Equine Science: Anästhesia and Pain Managment		25		**25**
17	Master of Equine Science: Gastrointestinal disorders III		31		**31**
17	Master of Equine Science: Respiratory disorders II		31		**31**
17	Master of Equine Science: Orthopaedic disorders II		32		**32**
17	Master of Equine Science: Emergency managment and racecourse veterinarian		30		**30**
17	Master of Equine Science: Reproduction I	29			**29**
17	Master of Equine Science: Diagnostic imaging	25			**25**
17	Master of Equine Science: Cardiovasular disorders	22			**22**
17	Master of Equine Science: Reproduction III	23			**23**
17	Master of Equine Science: Neurology, Muscular disorders	21			**21**
17	Master of Equine Science: Reproduction II	22			**22**
17	Master of Equine Science: Forensic / Animal welfare				
17	Continuing education for transferring vets: Diagnosis and Management of Allergies	48			**48**
17	Training for transferring veterinarians	62			**62**
18	October 29th 2020 E-Learning Course on Calf Health: "Questions to the Expert - Focus on Detection, Treatment, Prevention of Bovine Respiratory Disease, Focus on Vaccination			432	**432**
18	October 29th 2021 Seminar of the Association of Professional Hoof Trimmers in Germany (VKKD): Presentations of Results of the Project Prevalence of Dairy Cow Health Germany				
18	October 30th 2021 Seminar of the Association of Professional Hoof Trimmers in Germany (VKKD): Practical Training on a Dairy Farm				

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
18	May 2022 onwards E-Learning Course (www. laniv.de): Pain Recognition, Prevention in Cattle for Researchers and Staff working with Farm Animals required by Animal Welfare Act				
18	September 28th 2022 Seminar for Veterinarians and Hoof Trimmers in Germany (Hotel Rittmeister, 14542 Werder (Havel), Germany		40		**40**
18	September 29th 2022 Seminar for Veterinarians and Hoof Trimmers in Germany Presentation of first Results of the Project "Klauenfitnet"		20		**20**
18	E-Learning (www.klauenfitnet.de) E-Learning for Veterinarians, Hoof Trimmers, Farmers created by Project Partners of the Projects "Klauenfitnet" and Klauenfitnet 2.0"				
18	Education for Professional Hoof Trimmers at the LBZ Echem 8 hours	9			**9**
18	E-learning education for veterinarians: Basics of the "SchHaltHyg VO" - session: notifiable diseases and clinical symptoms (ATF, Vetion, BTK)		86		**86**
18	October 14th 2022, Seminar for Swine Practinioneers "New research results in the field of swine medicine" (DVG Fachgruppentagung Schweinekrankheiten, DVG-Vet-Congress)		120		**120**
18	July 13th 2023, First "Düppeler Infektions- und Resistenztage": Update in swine infectious medicine: viral, bacterial and parasitiv escape strategies (DVG Fachgruppentagung Schweinekrankheiten)				
18	November, 23th 2023; Seminar "Miniature pet pigs in small animal practice" (DVG)	8			**8**
19	Male Dog - Behavior and reproductive health			104	**104**
19	Workshop for Danish Cattle Veterinarians			20	**20**
19	Reproductive Management in Dairy Cattle - Workshop for Farmers	10			**10**
19	Workshop for Danish Cattle Veterinarians	12			**12**
20	66th Congress of the DGK-DVG; Berlin (congress president)			1,000	**1,000**
20	Master of Small Animal Science, Hematology			35	**35**
20	Master of Small Animal Science, Cardiology			35	**35**
20	Master of Small Animal Science, Dermatology		35		**35**
20	Specialist Group DVG Internal Medicine and Clinical Laboratory Diagnostics (online)		120		**120**

Scientific institutions	Courses	2022/23	2021/22	2020/21	Mean
20	Seminar DGK-DVG Vaccination of Small Animals, Berlin	15			**15**
20	Master of Small Animal Science, Gastroenterology	35			**35**
20	International Course of Small Animal Diseases, CH	100			**100**
20	Master of Small Animal Science, Small Mammals	35			**35**
20	Master of Equine Medicine, Ophthalmology		20		**20**
20	Master of Small Animal Science, Ophthalmology		35		**35**