



**WARSAW
UNIVERSITY
OF LIFE SCIENCES**

**Faculty of Veterinary
Medicine**

EAEVE

RE-VISITATION SELF-EVALUATION REPORT 2022



Contents of the RSER

Introduction_____ **3**

1. Correction of Major Deficiency_____ **5**

2. Correction of Minor Deficiencies_____ **7**

3. ESEVT INDICATORS_____ **10**

This RSER was prepared according to the instructions in the ESEVT SOP- Uppsala 2016 and the Exceptional transitory amendment of the SOP (due to COVID-19).

INTRODUCTION

The Faculty of Veterinary Medicine (FVM) of the Warsaw University of Life Sciences (SGGW) was assessed by the EAEVE Visitation Team in May 13 to 17, 2019. During the audit, in addition to areas worthy to praise, the Visitation Team identified areas for improvement listed in the final report, published on December 11, 2019. The insufficient number of horses, patients admitted to the University's premises which constitute the teaching base, was identified as a major deficiency (non-compliance with sub-standard 5.2).

In addition, the Visitation Team identified also three minor deficiencies. These included partial compliance with sub-standard 5.1. due to insufficient numbers of companion animal cadavers for pathomorphology training. The remaining minor deficiencies were related to 4.6 and 4.12. sub-standards in terms of insufficient implementation and control of student access to the faculty's facilities, the lack of designated areas for students to change protective coats and the general lack of security provisions in English.

Considering the identified non-compliances, the faculty has implemented numerous corrective actions that will be explained and commented on in detail in the following sections of the RSER.

In the time following the visitation, there were significant changes in Poland's legal regulations related to higher education. According to the Law on Higher Education and Science dated 20.07.2018, the University's Statute and organizational structure have changed. Therefore, there was a new division of tasks within the new structure.

The main structural changes that allow improving the organization of the teaching process included the separation of the formerly existing Faculty of Veterinary Medicine into two units dealing with matters of science/research and teaching. Accordingly, the following units were established on October 1, 2019:

1) Faculty of Veterinary Medicine (FVM) – a unit that performs exclusively tasks related to the teaching process; it provides undergraduate education, postgraduate studies and other forms of education. The Faculty is headed by the Dean, who oversees the educational process, including creating teaching plans and constant supervision over the quality of education. The Dean assigns teaching duties to Institute of Veterinary Medicine (IVM) employees and employees of other SGGW Institutes. The Dean fulfils his tasks with the help of two Vice-Deans, including the Vice-Dean for International Studies.

2) Institute of Veterinary Medicine (IVM) – a unit that performs scientific and research tasks; it is responsible for conducting scientific research in the veterinary scientific discipline, **providing personnel and infrastructural support for teaching activities of the FVM.** Within the IVM, there are eight Departments. The Director heads the IVM. Having received the demand for the teaching process from the Dean, the Director presents proposals from the Institute's appointed teaching staff, taking into consideration their scientific and research achievements and competencies. The approval of the teaching staff for the given academic year is the responsibility of the Dean.

The change in the structure of the University significantly improved the quality of education by increasing the Dean's competence in the selection of teaching staff and the selection of coordinators of individual subjects and modules. The changes introduced have also provided more effective tools for ongoing verification of the composition of the teaching staff. Before the beginning of each academic year, the Dean, after taking into account the competence of

teachers, their scientific and didactic achievements and engagement, as well as assessment of the quality of teaching in the previous academic years, decides on the composition of the staff. The best specialists from among the IVM staff, other institutes at SGGW, and external stakeholders are selected to teach.

In both new units, advisory bodies have been established – The Scientific Council of Veterinary Medicine Discipline (SCVMD) in the IVM and the Programme Council (PC) in the FVM. The SCVMD comprises representatives of all academic community groups and representatives of PhD students. The Programme Council is composed of the Dean and Vice-Deans and 20 members, including academic teachers representing the veterinary scientific discipline, at least one representative of another discipline, and representatives of external stakeholders and students (at least 20%).

The Scientific Council of Veterinary Medicine Discipline decides on the scientific activity of the Institute; in particular, it determines the scientific policy of the Institute, conducts promotion proceedings of scientists, gives opinions on candidates for employment. In addition, the SCVMD provides its view on the study program in the field of study assigned to the discipline.

The Programme Council is a consultative and advisory body supporting the Dean in carrying out tasks related to the education process at all stages (undergraduate, postgraduate and other forms); it includes in particular:

- 1) supporting the Dean in the process of supervising the quality of education in the fields of study assigned to a veterinary medicine scientific discipline;
- 2) providing opinions on matters related to education in a veterinary discipline or other matters presented to the Council by the Dean;
- 3) developing and giving opinions on draft curricula and study plans;
- 4) analysing the results of the evaluation of the teaching process and giving recommendations in this regard;
- 5) evaluating and improving curricula, study plans, and syllabi.

While presenting the study programme, it should be emphasized that the Regulation of the Minister of Science and Higher Education of July 17, 2019 regarding the standard of education for those preparing to practice veterinary medicine came into force on July 23, 2019. The regulation stipulates that the number of ECTS credits required for graduation cannot be less than 360. The number of teaching hours carried out as a part of the course, including professional practice, cannot be less than 5200. The new standard indicators are significantly higher than those of 2011, where the minimum number of ECTS credits was 330 and the minimum number of teaching hours was 5100. Therefore, the Faculty has adjusted the curriculum to the new education standard, considering the above. The new curriculum was introduced from the 2019/2020 academic year.

The Faculty is grateful to the EAEVE Visiting Team for their suggestions for improving teaching quality as well as biosecurity internal procedures. The comments contained in the Final Report, especially the suggestions for improvement, resulted in an internal discussion among all members of the academic community, in which students had a significant part. As a result, changes were made to the curriculum and actions were taken to enrich the didactic material in clinical subjects. We believe that now our processes comply with the EAEVE requirements.

1. CORRECTION OF MAJOR DEFICIENCY

1.1. Major Deficiency. The Visiting Team found noncompliance with sub-standard 5.2 due to an insufficient number of horses being treated at the clinic, which in turn was insufficient to provide adequate clinical training.

1.1.1. Factual information

The Visiting Team found that in the three years prior to the visitation, the number of equine patients had significantly dropped from 185 cases in 2015 to 97 cases in 2018. By May 2019, the Horse Clinic had 22 cases, which were noted in the evaluation report as an insufficient number in terms of securing appropriate clinical training.

The state of affairs described in the report was influenced by many factors. Some of them remained beyond the University's control. The most important was the start of a large national road investment worth more than 1 billion Euros, implemented between 2017 and 2021 in immediate vicinity of the buildings of the Horse Clinic. Temporarily delineated crossings and large-scale construction works caused a change in the previously valid, convenient traffic organization, which resulted in difficulties and restrictions in horse transport. It should be noted that the highest intensity of work and associated complications occurred between 2019 and mid of 2021. The delay in the completion of said investment (which should be primarily finished in August 2020) definitely had a negative impact on the operation of the Horse Clinic. The investment has now been completed and a permanent traffic system is in place. The restoration of a permanent traffic pattern has improved access to the Horse Clinic.

One cannot disagree with the Visiting Team's comments that the University's efforts were focused on supporting the Veterinary Research Centre and Centre of Biomedical Research. This was strictly connected with their continuation at the University in the form of the Centre of Translational Medicine (CTM), a project worth approx. 25 million Euros, under which the existing buildings were expanded. During the period of construction work, the number of horses treated intramurally was limited and extramural practical training was conducted for compensation of existing deficit. The investment has now been completed.

Following the recommendations of the Visitation Team, the University authorities have taken steps to increase the number of horses treated:

- 1) In connection with the change of University structure, a new unit with the rights of an institute has been established in the form of the Centre of Translational Medicine. The changes described above were carried out in 2021.
- 2) As a result, in January 2021 a new head of the *Department of Large Animal Diseases and the Clinic* was appointed, in the structure of which mainly clinicians involved in practical training remained.
- 3) In January 2021, the new head of the Horse Clinic was appointed.
- 4) The previous head of the Department was appointed as the Director of the CTM, taking with him the staff mainly involved in conducting highly specialised scientific research.

The change of structure combined with the completion of investments resulted in an increase in the number of horses treated intramurally in the Horse Clinic. In the academic year 2020/2021 (until the end of September 2021), a total of 153 horses were admitted, 30 of which

underwent imaging examinations using high-resolution computer tomography, while the remainder underwent other procedures such as surgery and internal medical treatments. At the same time there was no limitation of animals in EPT as different units are involved in students teaching.

To increase the number of horse patients, the new head of the *Department of Large Animal Diseases and the Clinic* launched *on-call veterinary service* in 2020/2021 academic year. From January 2021 to date, a total of 220 horses were treated in the Horse Clinic.

Number of horse patients admitted to Horse Clinic			
Academic year	2020/2021	2019/2020 COVID-19 crisis	2018/2019
	153*	40	57

*the total number of 153 horses consist of 87 horses which underwent inpatient treatment and 66 horses treated within *on-call veterinary services*

1.1.2. Comments

The actions described above brought measurable effects in the form of an increase in the number of animals treated in the *Department of Large Animal Diseases and the Clinic*. It did not happen by leaps and bounds, i.e. in the academic year immediately following the visitation, as this was a process requiring the completion of the ongoing investments. An additional factor delaying the implementation of the task was the COVID-19 pandemic, as a result of which there was a slowdown in both investment works and in completion of the structural changes carried out on the basis of the Faculty of Veterinary Medicine in its former structure. It should be added that during the pandemic the Faculty did not suspend on site teaching and thus, allowed students to additionally obtain practical learning outcomes also in the field of equine diagnostics and treatment. The introduced model of management required the significant involvement of both academic staff and students. As already mentioned, the effects of the remedial actions carried out became apparent in 2021, when there was a significant increase in the number of animals treated, surpassing the figures recorded in 2015.

After the change in the structure of the University, the Faculty has the opportunity to divide the conduction of individual subjects or modules between the *Department of Large Animal Diseases and the Clinic* and the newly-created CTM. Therefore, practical training related to broadly defined hippiatry is conducted mainly by practitioners employed at the *Department of Large Animal Diseases and the Clinic*. Although both units work closely together in the implementation of the teaching process, clinical activity remains under control of experienced clinicians focused on securing a sufficient equine, clinical caseload (both medicine and surgery) for basic training of undergraduate students. The admission of equine patients for treatment is done after analysing the logistical possibilities in terms of providing efficient service throughout their entire stay at the Clinic. This refers especially for surgical patients who require intensive care in the postoperative period. The efforts of the current Head of the department and academic staff have resulted in the continued presence of horses treated in the Clinic.

2. CORRECTION OF MINOR DEFICIENCIES

2.1. Minor Deficiency 1: The establishment is partially compliant with Substandard 4.6 because of partly insufficient implementation and control of student access to department facilities, changing into protective coats, and general absence of information in English on local safety procedures.

2.1.1. Factual information

The visiting team pointed out the fact that despite being well prepared in terms of health and safety as well as biosecurity procedures, there were instances of students who changed their protective clothing in the common areas of the buildings or after they had already entered the laboratories. Visitors were also found that have been allowed into the necropsy room without changing their footwear to rubber boots as required by biosafety procedures.

The observations described in the post-visitation report were reviewed in detail, after which corrective procedures were implemented. It was found that most of the incidents mentioned in the report pertained to building No. 24, which mainly houses basic science facilities. This building also houses the necropsy room. Together with the OHS Inspectorate, an inspection of the premises was carried out and during discussions with heads of certain facilities, priorities were set for actions aimed at increasing the level of sanitary safety.

It was determined that the critical point impeding compliance with sanitation procedures was the traditional checkroom, located just inside the building entrance. In its arrangement students were only able to leave their outer garments, while it did not facilitate leaving backpacks, shoes and other personal items, which should not be brought into laboratories or necropsy rooms. Therefore, the checkroom was eliminated and replaced with a system of lockers equipped with combination locks. Their number and location in the building allows students to leave personal belongings while maintaining social distancing during this times of the COVID-19 pandemic. The applied solution meant that students could now go to the appropriate facilities located in the building without any hand luggage and unnecessary items and change into protective clothing inside the appropriate facilities before entering the laboratories. The above solution was implemented due to the inability to make changes in the *Division of Comparative and Clinical Anatomy*. Originally, the plan was to install some of the lockers inside the said facility, but the project was not approved by the OHS Inspectorate due to the fact that placing additional objects in the passageways would have a negative impact on fire safety. Due to the inability to remodel of existing space, the alternative solution described above was implemented.

The heads of all the facilities were obliged to intensify current control of compliance with the sanitary safety procedures in force.

In the case of the problem with insufficient rigorous observance of cleanliness and access procedures to operating theatre in *Small Animal Veterinary Clinic*, the head of the unit was obliged to intensify current supervision of their application. The access to the operating theatre is restricted to authorised staff or students under the direct supervision of academic staff. It is possible only after changing shoes and getting into protective clothing. The preparation of patients for surgery and their monitoring after surgery takes place outside the operating theatre. For this purpose, rooms on the first floor of the building located near operating theatre have been designated.

2.1.2. Comments

Following the visitation, the upgrade work began, resulting in an impact on the way clothing is changed in building No. 24. The locker system was launched at the beginning of the 2020/2021 academic year.

2.1.3. Suggestions for improvement

None

2.2. Minor deficiency 2: The Establishment is partially compliant with Substandard 4.12 because of the general absence of information in English on local safety procedures.

2.2.1. Factual information

The Visiting Team found lack of adequately displayed information on biosafety procedures available in English. As a result of the comments, the manuals located inside all facilities were reviewed and supplemented with applicable English language notations. The entire University has taken action to improve the information system both inside and outside the buildings. Totems with necessary information in Polish and English were installed on the campus. All signatures on doors, including staff offices, have been provided with bilingual labels to assist in obtaining necessary information. Bilingual biosafety instructions, which are especially important during a pandemic, were placed on the entrance doors of buildings and departments, supplemented with pictograms showing orders and restrictions resulting from current sanitary regulations. Regular inspections carried out by OHS Inspectorate combined with a review of the manuals are conducted more frequently than before.

2.2.2. Comments

The Dean of the Faculty has appointed a new *Information Policy Coordinator* to keep important information updated on the Faculty website. Additionally, these are communicated to students via social media. The above efforts were extremely helpful during the height of the pandemic when students were kept informed of changes in current sanitary restrictions.

During the period of increase in COVID-19 infections in Poland in 2020/2021 academic year, the announcements from the Dean regarding changes in didactic implementation were published at least once a week on the Faculty's website, social media as well as via direct contact with class representatives.

2.2.3. Suggestions for improvement

None

2.3. Minor Deficiency 3: The Establishment is partially compliant with Substandard 5.1 because of insufficient number of cadavers in companion animal necropsies.

2.3.1. Factual information

The visiting team noted the insufficient number of companion animal necropsies, which were as follows:

Companion animal necropsies in the three academic years preceding full visitation

Academic year	2017/ 2018	2016/ 2017	2015/ 2016
Number	97	155	183

From the summary provided, it is apparent that there was a reduction in the number of necropsies performed in the period prior to the visitation.

In the SER there was a proposal of the following solution to the existing problem. Supplementing the syllabus with a provision that only students who performed 4 necropsies on at least 2 different animal species intramurally or during EPT under the supervision of a licensed DVM will be admitted to the pathology exam. The solution proposed in the SER has been implemented and is in use.

A part of the compensation for the deficit of companion animals was the provision in the *Day One Skills Diary* (DOSD) that student are permitted to perform 2 necropsies out of 4 during the courses in EPT.

After a thorough analysis of the actions outlined in the SER, it was determined that a good solution to increase the number of companion animals necropsies is also to create an additional storage space for cadavers. Therefore, apart from the cold rooms of *Department of Pathology and Veterinary Diagnostics*, the *Small Animal Clinic* building was additionally equipped with a large cold room allowing for safe storage of a large number of cadavers. They are a source of didactic material during the courses conducted in the *Small Animal Clinic* (practical trainings on the material of animal origin such as Veterinary surgery and Veterinary ophthalmology as well as ESAVS courses), and additionally play the role of a buffer in the case of a periodic shortage of didactic material necessary for the implementation of necropsy classes within the framework of the pathomorphology course.

The above actions resulted in an increase in the number of companion animal necropsies from the critical value of 97 recorded in the 2017/2018 academic year to the value of 275 recorded during the last academic year.

Companion animal necropsies						
Academic year	2020/2021		2019/2020		2018/2019	
By species	Dogs	Cats	Dogs	Cats	Dogs	Cats
	134	141	41	53	54	52
Total	275		94		106	

2.3.2. Comments

The analysis of the number of necropsies performed in the current, as yet to be completed, academic year shows that are grounds to believe that the SOP indicators will soon be fulfilled.

2.3.3. Suggestions for improvement

None

3. ESEVT INDICATORS

3.1. Factual information

	Raw data from the 2 full academic years excluding AY 2019/ 2020	2020/2021	2018/19	Mean
1	n° of FTE academic staff involved in veterinary training	182.5	175	178.75
2	n° of undergraduate students	1242	1214	1228.00
3	n° of FTE veterinarians involved in veterinary training	137.5	126	131.75
4	n° of students graduating annually	173	184	178.5
5	n° of FTE support staff involved in veterinary training	63	69.5	66.25
6	n° of hours of practical (non-clinical) training	1052.5	1038.5	1045.5
7	n° of hours of clinical training	1087.5	1087.5	1087.5
8	n° of hours of FSQ & VPH training	550	535	542.5
9	n° of hours of extra-mural practical training in FSQ & VPH	190	190	190
10	n° of companion animal patients seen intra-murally	7911	8205	8058
11	n° of ruminant and pig patients seen intra-murally	456	458	457
12	n° of equine patients seen intra-murally	153	57	105
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	253	311	282.0
14	n° of companion animal patients seen extra-murally	932	889	910.5
15	n° of individual ruminants and pig patients seen extra-murally	1061	1517	1289.0
16	n° of equine patients seen extra-murally	95	161	128.0
17	n° of visits to ruminant and pig herds	171	238	204.5
18	n° of visits of poultry and farmed rabbit units	26	27	26.5
19	n° of companion animal necropsies	275	106	190.5
20	n° of ruminant and pig necropsies	21	69	45.0
21	n° of equine necropsies	46	14	30.0
22	n° of rabbit, rodent, bird and exotic pet necropsies	2315	3102	2708.5
23	n° of FTE specialised veterinarians involved in veterinary training	52	45	48.5
24	n° of PhD graduating annually	6	10	8.0

	Calculated Indicators from raw data	Establishment	Median	Minimal	Balance ³
		values	values ¹	values ²	
I1	n° of FTE academic staff involved in veterinary training / n° of undergraduate students	0.146	0.16	0.13	0.020
I2	n° of FTE veterinarians involved in veterinary training / n° of students graduating annually	0.738	0.87	0.59	0.148
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0.371	0.94	0.57	-0.195
I4	n° of hours of practical (non-clinical) training	1045.500	905.67	595.00	450.500
I5	n° of hours of clinical training	1087.500	932.92	670.00	417.500
I6	n° of hours of FSQ & VPH training	542.500	287.00	174.40	368.100
I7	n° of hours of extra-mural practical training in FSQ & VPH	190.000	68.00	28.80	161.200
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	45.143	70.48	42.01	3.134
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	2.560	2.69	0.46	2.097
I10	n° of equine patients seen intra-murally / n° of students graduating annually	0.588	5.05	1.30	-0.710
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	1.580	3.35	1.55	0.035
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	5.101	6.80	0.22	4.878
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	7.221	15.95	6.29	0.927
I14	n° of equine patients seen extra-murally / n° of students graduating annually	0.717	2.11	0.60	0.122
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	1.146	1.33	0.55	0.598
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0.148	0.12	0.04	0.104
I17	n° of companion animal necropsies / n° of students graduating annually	1.067	2.07	1.40	-0.333
I18	n° of ruminant and pig necropsies / n° of students graduating annually	0.252	2.32	0.97	-0.718
I19	n° of equine necropsies / n° of students graduating annually	0.168	0.30	0.09	0.075
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	15.174	2.05	0.69	14.481
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0.272	0.20	0.06	0.209
I22*	n° of PhD graduating annually / n° of students graduating annually	0.045	0.15	0.09	-0.043

3.2. Comments

The small number of pig carcasses subjected to necropsies is closely related to the legal restrictions in Poland, as there have been outbreaks of African Swine Fever (ASF) in Poland from the time immediately preceding the visitation to the present day. The ASF has been a major problem for the pig industry in Poland for the last seven years. Factors, like long-distance ASF spread to new regions of the country, are mainly caused by human activity and a lack of awareness of potential disease among pig herds. The only way to reduce the spread of ASF is through strict compliance with biosecurity rules. Despite many efforts to adhere to the sanitary regulations the disease occurred in a number of regions. Although it started in eastern Poland, it rapidly occurred also in the western part of the country, close to the German border. As a result, restrictions on access to pig farms are in place. Extramurally classes are only possible in areas not affected by the ASF epidemic. In other cases it is not possible to enter the affected area. An up-to-date map of areas covered by various restrictions is available on the official government website <https://bip.wetgiw.gov.pl/asf/mapa/>. Nevertheless, during this period, practical classes were conducted on pig farms.

The reduction in the number of necropsies in this species resulted in the I18 Indicator. Since the current situation is determined by outer factors independent of Faculty's activity we do not expect to improve related Indicator until the ASF epidemic is extinguished.

Following the Visitation Team's comments about the lack of a global strategy for sourcing animal material and the suboptimal number of ruminant necropsies as well as absence of small ruminants seen extramurally, the Faculty has taken following corrective steps:

- 1) Following the regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (Animal by-products Regulation) some agreements were signed with official veterinarians regarding the possibility of using ruminant carcasses for teaching purposes as a necropsy material. Since Article 17 of the regulation mentioned above states that the Competent Authority may, by way of derogation from Articles 12, 13 and 14, authorise the use of animal by-products and derived products for exhibition, artistic activities, diagnostic, educational or research purposes under conditions that ensure the control of risks to human and animal health. Following agreements, cattle carcasses may be transferred to the University for teaching purposes. The Faculty bears the cost of their transport and disposal by authorised company after necropsy. We expect to see an increase in the number of ruminant necropsies performed intramurally in the near future.
- 2) Due to the shortage of small ruminants, the Faculty in cooperation with the Institute of Veterinary Medicine and the Institute of Animal Sciences took care of the sheep flock located in the *Experimental Farm Żelazna*, located 90 kilometres from Warsaw. There are 200 sheep of the local breed and a flock of 36 goats. The Faculty participates in the costs of maintaining the farm, which beside a commercial use is also a teaching facility where students have the opportunity to do practical training on small ruminants. Due to financial support by the Faculty and two Institutes, the number of animals is expected to increase in the coming years.
- 3) In the current curriculum the elective subject *Diseases of small ruminants* was introduced.

3.3. Suggestions for improvement

None

Since the beginning of the COVID-19 pandemic and the announced legal acts limited the University's ability to function, numerous actions have been taken to maintain an effective didactic process at all levels of education at the FVM. The analysis of the contents of the educational standard has indicated that students cannot achieve the assumed practical outcomes of learning when classes are only conducted remotely. There was a need to maintain teaching in contact classes for subjects where students must obtain practical learning outcomes. Therefore, for summer semester 2019/2020 and the whole 2020/2021 academic year, the Faculty developed a hybrid teaching plan, which took into account the provisions of public law (Ministry of Science and Higher Education, Chief Sanitary Inspector) as well as University regulations (the Rector's orders and recommendations of the head of the SGGW Student Health Centre - NZOZ SGGW). Subsequent announcements on changes in teaching plans were sent to students and employees of SGGW by the Dean and persons authorized by him.

General rules of education within a hybrid (COVID-19) teaching plan implemented by the Faculty:

- in the case of subjects/modules in which practical learning outcomes are indicated, the minimum number of hours necessary to achieve and verify these outcomes has been determined;
- the plan was established individually for each level of education to limit the number of students in groups taking in-person classes and to minimise the number of students residing at the same time in the University buildings;
- practical issues which necessarily required direct contact with the teacher and/or patient were held stationary (in the Faculty laboratory rooms) in the form of thematic blocks while maintaining the principles of the COVID-19 sanitary regime;
- lectures were conducted in a remote form exclusively;
- theoretical contents constituting the introduction to further practical classes were completed in an online form using various platforms and communicators (MS Teams, Moodle, Zoom);
- course materials were made available to students in original presentations, videos and files in various formats (Word, Power Point, pdf, HTML 5);
- consultations were conducted mainly in a remote form (online or by phone).

Detailed changes in the course of education during a pandemic:

The academic year 2019/2020:

- due to the restriction of the University's operation announced in the decree of the Ministry of Science and Higher Education, contact classes were suspended from 23 March to 25 May, 2020;
- during the period of suspension of classes in the University buildings, the Faculty switched to a remote teaching mode; during this period, lectures and theoretical content preparing for practical classes were implemented;
- practical classes assigned to the summer semester were conducted in in the Faculty laboratory rooms from the end of May to September 2020;
- when the period of suspension of the practical expired, the Faculty first directed the international students who stayed in Poland to carry out their practical classes;

- due to sanitation restrictions that critically hampered the implementation of the summer practice (during the height of the pandemic restrictions, external stakeholders implemented severe restrictions on entry for outsiders, including students), the implementation date of this practice was exceptionally moved to the next academic year (2020/2021); the changes were set up according to the scheme:
 - *summer breeding practice* after semester 4 of the 2019/2020 academic year – final course grade postponed to the end of semester 6 (2020/2021);
 - *summer practice in Veterinary Inspection* (in establishments forming the raw material base of the meat and fish industry, e.g. abattoirs for slaughtered animals, poultry, game) and *summer clinical practice* after semester 8 of the 2019/2020 academic year – final course grade postponed to the end of semester 10 (2020/2021);
 - *summer practice in Veterinary Inspection* (food of animal origin production plants - fish processing plants, meat processing plants, dairies, meat canneries, etc.) and *summer clinical practice* after semester 10 of the academic year 2019/2020 – final course grade postponed to the end of semester 11 (2020/2021).
- In 2019/2020, 17 students were qualified under the ERASMUS programme. Only 14 students went; since the outbreak of the coronavirus pandemic, the stays in foreign universities have been discontinued, the time for their implementation has been extended till April 2021.

The academic year 2020/2021:

- due to the suspension of contact classes at the University from 9 to 30 April 2021, new dates were set for their implementation in September 2021; this concerned subjects assigned to semester 4, the practical learning outcomes of which cannot be implemented through remote learning;
- final credits for summer practices from the 2019/2020 and 2020/2021 academic years were held in September 2021.

The Faculty of Veterinary Medicine in Warsaw has taken measures since the beginning of the pandemic to allow the realisation of practical training, which was possible thanks to the current changes in the study plan adapted to the current national and University regulations as well as the possibility of their realisation in the sanitary regime.

In conclusion, from the beginning of the coronavirus pandemic, the faculty took steps to adapt the learning process to the current regulations, both national and University, while having the highest priority to enable students to obtain practical learning outcomes.

	Raw data from the AY 2019/ 2020	2019/2020
1	n° of FTE academic staff involved in veterinary training	172
2	n° of undergraduate students	1189
3	n° of FTE veterinarians involved in veterinary training	120
4	n° of students graduating annually	179
5	n° of FTE support staff involved in veterinary training	68.5
6	n° of hours of practical (non-clinical) training	1048.5
7	n° of hours of clinical training	1087.5
8	n° of hours of FSQ & VPH training	550
9	n° of hours of extra-mural practical training in FSQ & VPH	190
10	n° of companion animal patients seen intra-murally	4774
11	n° of ruminant and pig patients seen intra-murally	500
12	n° of equine patients seen intra-murally	40
13	n° of rabbit, rodent, bird and exotic patients seen intra-murally	264
14	n° of companion animal patients seen extra-murally	683
15	n° of individual ruminants and pig patients seen extra-murally	1102
16	n° of equine patients seen extra-murally	107
17	n° of visits to ruminant and pig herds	244
18	n° of visits of poultry and farmed rabbit units	0
19	n° of companion animal necropsies	94
20	n° of ruminant and pig necropsies	17
21	n° of equine necropsies	8
22	n° of rabbit, rodent, bird and exotic pet necropsies	2543
23	n° of FTE specialised veterinarians involved in veterinary training	51
24	n° of PhD graduating annually	15