



WARSAW UNIVERSITY OF LIFE SCIENCES -
SGGW
FACULTY OF VETERINARY MEDICINE

Self Evaluation Report

for the European Association of Establishments for Veterinary Education

Full Visitation 13-17 May 2019

March 2019

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CONTENTS

Introduction - 3 -

1. Objectives and Organisation - 5 -

2. Finances..... - 13 -

3. Curriculum..... - 17 -

4. Facilities and equipment - 27 -

5. Animal resources and teaching material of animal origin - 32 -

6. Learning resources..... - 39 -

7. Student admission, progression and welfare - 43 -

8. Student assessment..... - 49 -

9. Academic and support staff - 52 -

10. Research programmes, continuing and postgraduate education..... - 56 -

11. Outcome Assessment and Quality Assurance - 61 -

12. ESEVT Indicators - 67 -

Glossary..... - 69 -

List of appendices - 70 -

Introduction

Preamble

In the context of this report, the terms “Faculty” and “Establishment” are used interchangeably and all refer to the Faculty of Veterinary Medicine, Warsaw University of Life Sciences - SGGW. The terms “University” and “WULS-SGGW”, if not stated otherwise, refer to Warsaw University of Life Sciences - SGGW.

Brief History of the Establishment and of its previous ESEVT Visitations

An edict dating from 1816 provided the legal foundation for establishing a practical school of veterinary medicine in the Polish Kingdom. The Faculty of Veterinary Medicine at the Warsaw University of Life Sciences-SGGW (WULS-SGGW) derives directly from the Agronomic Institute situated in Burakow near Warsaw, a veterinary school founded on 17th July 1824. The school became a part of the Agronomic Institute in Marymont. The studies lasted two years. The graduates found work mainly in the army, looking after horses. The November Uprising paused the school’s activity for ten years. The School of Veterinary Surgeons, founded in 1840, was an independent academy that extended its programme from two to four years as a result of a series of consecutive reorganisations. In 1889 the school’s status advanced to college. In 1901 the school was moved to a modern building complex in Grochow that was designed exclusively for the purposes of the college. During World War I the school’s educational activity was paused. It was later reactivated by founding the Veterinary Medicine Division by the Medicine Faculty at Warsaw University.

In 1927 the Council of the Medicines Department established an independent Faculty of Veterinary Medicine at Warsaw University. Since then, the Faculty developed dynamically until World War II. After the war, educational activity was re-established in the 1946-47 academic year. The first years were dedicated to the re-assembly of the Faculty personnel and adjustment of the facilities which during the war were used as a hospital of infectious diseases.

In 1952 the Faculty was moved from Warsaw University to WULS-SGGW. During the following years, several reorganisations of the Faculty were conducted, including the last one in 1999 as recommended by the European Association of Establishments of Veterinary Education, EAEVE. In the beginning of the 21st century there was a rapid development which was enhanced by moving the Faculty to a modern campus in Ursynów and Wolica. The research, diagnostic and teaching activities were upgraded and international exchange of research workers and students was intensified. In 2007 the Faculty enabled studies for international students in English. Eventually in 2008, the National Accreditation Committee has issued a positive assessment of teaching and research activities.

Previous EAEVE evaluation visits took place in 1999 and 2010.

Main Features of the Establishment

The Establishment is one of five veterinary medical training and research facilities in Poland. It is located in the central Poland in the Mazovian Voivodeship, in the capital city of Warsaw.

Main Developments since the last Visitation

The last re-visitation in 2014 revealed low patient flow in small animal clinic as the major deficiency .

- The head of the Department of Small Animal Diseases with the Clinic was changed on the 1st of January 2017. Besides, a separate position of the head of the Clinic was created to supervise the Clinic.
- There was a significant increase in the number of admitted patients (about 31%): 2014 ~22000 entries in patient record system vs 2018 ~29000 .
- From 2015 to 2018 the night duties were offered only for hospital and post-operative patients. At this time the night care was a voluntary service for students. Starting from 2019 the 24-hour duty was introduced for all patients and they are a mandatory service for students.

- In order to increase the number of patients available for students, the Faculty signed a collaboration contract with the biggest shelters around Warsaw. The students participate in practical classes organized by the teacher and veterinarians from the shelter.
- Last year there were around 20 inspections of clinical classes which resulted in recommendation of teaching methods.
- External specialists in oncology, neurology, ophthalmology, cardiology, emergency medicine, and exotic animals diseases were employed to improve the offer for potential patients.
- The range of devices for diagnostics and treatment was extended (digital radiography system with fluoroscopy, TCI column, 16-row computed tomography). In addition, a contract with Technical University was signed to enable the performance of magnetic resonance of animal patients.

ORGANISATION

- In 2016, there was a Dean election which changed the constitution of Dean college.

FINANCES

- The Faculty achieved the status of KNOW (Leading National Research Centre) for 2015-2019. The status generated significant financial support for research activities.
- The Faculty received NCBR POWR Grant for 2017-19. The funds contributed to the financing of visiting professors visits and the organization of internships at external stakeholders.

CURRICULUM

- In 2016, more than 30 new electives were introduced for Polish and English speaking students.
- The introduction of “Day One Skills” book which is mandatory to fill prior the obtainment of DVM title
- The mandatory training work was implemented as a part of each clinical training.

FACILITIES AND EQUIPMENT

- The extension of autopsy room to enable the post-mortem examination of large animals
- The Center for Biomedical Research and Veterinary Research Center in the Department of Large Animal Diseases with the Clinic was created.
- The Small Animal Clinic was equipped with large number of modern diagnostic devices.
- In 2017, the Laboratory of Veterinary Metabolomics in the Department of Physiological Sciences was created.

Major Problems encountered by the Establishment

- Significant decrease of funds given by MSHE (Ministry of Science and Higher Education) and assigned to teaching activities,
- No post-mortem examinations of cattle due to the formal regulations of cattle trade in Poland; insufficient number of intramural pets’ and equine post-mortem analyses is compensated by autopsies performed in EPT (for Comments see point 5.2)
- The dominance of basic course over clinical courses in the curriculum; the dominance results from the decree on education standards for veterinary and architecture studies (DESVetArcS); some changes in the education standards are scheduled, see point 3.2

Version and date of the ESEVT SOP which is valid for the Visitation

The Self Evaluation Report follows the requirements as set out in ESEVT Standards for Accreditation (as approved by the EAEVE General Assembly on 12 May 2016).

1. Objectives and Organisation

1.1. Factual information

1.1.1. Details of the Establishment

Details of the Establishment	
Name	Faculty of Veterinary Medicine
Address	159 Nowoursynowska Street, 02-776 Warsaw, Poland
Phone number	+48 22 593 36 10
Fax number	+48 22 593 36 15
Email address	dwmw@sggw.pl
Website	wmw.sggw.pl
Establishment's Head (Dean)	Prof. dr hab. Marcin Bańbura
Vice-Dean for Students' Affairs	dr hab. Piotr Jurka
Vice-Dean for Research Affairs	Prof. dr hab. Arkadiusz Orzechowski
Vice-Dean for Foreign Studies	dr hab. Michał Godlewski

Person(s) responsible for the professional, ethical, and academic affairs of the VTH	
Department of Small Animal Diseases with Clinic	dr hab. Piotr Jurka
Department of Large Animal Diseases with Clinic	Prof. dr hab. Zdzisław Gajewski

Official authorities overseeing the Establishment
The Rector of Warsaw University of Life Sciences – Prof. dr hab. Wiesław Bielawski
The Vice-Rector for Didactics – Prof. dr hab. Kazimierz Tomala
The Vice-Rector for Research – Prof. dr hab. Marian Binek
The Senate of Warsaw University of Life Sciences

1.1.2. Summary of the Establishment Strategic Plan with an updated SWOT analysis, the mission and the objectives

The Faculty Council approved the new document titled “The faculty teaching quality assurance and improvement system” (FTQAIS) on July 2013. It is considered as a working paper which is supposed to be revised frequently. Section 3 of this document “2012-2020 Faculty Strategy” describes the Establishment Strategic Plan.

The Faculty's Educational Objectives:

The first educational objective is to provide a curriculum and the instructional resources necessary to enable students to obtain the professional title of *Lekarz weterynarii (Lek. wet.,* an equivalent of *brit. Veterinary Surgeon, VS, and am. Doctor of Veterinary Medicine, D.V.M).* The Faculty has sought to develop a curriculum that provides a strong foundation in veterinary medical sciences. It is expected that graduates will be well versed in the fundamentals of veterinary medicine science and will be able to meet the professional challenges they will encounter throughout their career.

The second educational objective is to provide further education opportunities for postgraduate veterinarians. The most gifted and dedicated students can continue their education and participate in a 4 year doctoral program ending with a Ph.D. degree. For veterinarians who already work in various fields of veterinary medicine, the Faculty provides post-gradual training leading to specialist diplomas.

The third educational objective is to encourage and provide continuing education opportunities for all graduate veterinarians. Nowadays, only the engagement in lifelong learning is integral to achieve great potential in the veterinary profession.

The Faculty's Research Objectives:

- Deal with problems of animal and human health in alleviating pain and suffering
- Improve animal welfare and reduce the costs of food and animal production by prevention and treatment of diseases
- Improve the quality and safety of food of animal origin
- Expand the professional basis of theoretical and practical knowledge
- Introduce new methods into veterinary research and practice
- Provide opportunities for faculty development
- Provide postgraduate training opportunities for candidates who wish to prepare their Ph.D. theses within a broad range of veterinary medicine disciplines

The major objective of the Faculty in the area of service is to provide a wide range of veterinary medical services. The majority of services are provided by two clinics: The Small Animal Clinic and The Large Animal (Horse) Clinic, both of which are very important instructional sources for the Faculty of Veterinary Medicine. Faculty personnel provides also a service in the field of laboratory analyses, personal and telephone consultations, participation in various extra-mural programs, conferences, meetings with veterinary clinicians, nutritionists, farmers, pharmaceutical, and feed industry representatives, as well as farm visits.

Mission and values of the Faculty

The traditions of the Faculty of Veterinary Medicine, WULS-SGGW date back to the veterinary school established in 1824 in Burakow. In 1927 the Senate of the University of Warsaw established a self-standing Veterinary Faculty which in 1952 become a part of Warsaw University of Life Sciences. Currently, the Faculty of Veterinary Medicine is located in Ursynow district of Warsaw, at 159 Nowoursynowska St., in Wolica at 100 Nowoursynowska St. and in Obory near Konstancin (livestock farm). The Faculty operates long-cycle studies in Polish and in English lasting 11 semesters, including 5,100 hours of courses and practical training. The students acquire knowledge on veterinary sciences in accordance with the requirements laid down in: the Act on the Profession of the Veterinary Surgeon and on Veterinary Chambers, the Veterinary Inspection Act, the Act on Animal Health Protection and Control of Infectious Diseases, the Animal Protection Act, the Pharmaceutical Law, and the Directive of the European Parliament 2005/36/EC.

The graduates receive a professional title of *lekarz weterynarii* (equivalent to *veterinary surgeon* or doctor of veterinary medicine – DVM) which authorises them to work in Poland and other European Union (EU) countries.

In accordance with the strategy adopted by the University, people are considered the greatest wealth. Consequently, the University and all belonging faculties, including the Faculty of Veterinary Medicine, care about good interpersonal relations, systematic staff development, and the highest quality of content delivery to students. The academic community is open to teaching and research needs of Warsaw, the Mazowsze Region and entire Poland, as well as other cooperation forms with business environment. While bringing up the students, the Faculty aims to open their minds, instil tolerance, patriotism, honesty, scientific integrity and respect for all people.

The mission of the Faculty is consistent with the University statement which says:

To promote economic and intellectual development of the Polish society, with particular attention to rural areas, food economy, animal health and public health protection, and the overall environment, our goal is to conduct a top level scientific research and teaching, as well as development activity. Professionalism, taking care for quality, diligence and innovation are merits underlying the identity and success of our University.

SWOT strategic analysis

Strengths

- Developed infrastructure and concentrated premises
- High level of research and extensive teaching experience of academic teachers
- High rank of the Faculty in the academic community, cooperation with other national and international teaching & research establishments and business establishments
- Stable organisation structure that corresponds to the research conducted and courses delivered
- Broad learning opportunities, including courses performed in English

Weaknesses

- Low mobility of research staff,
- Low activity in looking for international grants and grants from national business institutions compared to the existing opportunities,
- Low commercialisation of the results of research conducted at the Faculty
- Insufficient influence of employers' representatives on the study programmes

Opportunities

- Extensive WULS-SGGW platform for remote learning,
- Mobility of academic staff as part of national and international placements,
- Broad opportunities for attracting national and foreign funds for research,
- Participation in international research projects,
- Teaching on an international scale

Threats

- Deepening population decline affects adversely the number of potential new students
- Lower subsidies from the national budget for the development of the Establishment
- Growing competition from other universities which offer similar veterinary programme
- Curriculum not adapted to client's requirements
- Low salaries in higher education

1.1.3. Summary of the Establishment Operating Plan with Timeframe and Indicators of Achievement of its Objectives

The Establishment Operating Plan is included in FTQAIS – section 3.

In accordance with the strategy adopted by the University, the activity of the Establishment will aim at improving teaching and research, and developing the transfer of knowledge to the economy. Each of these areas involves important challenges imposed by the present-day environment on higher education institutions. The Faculty attaches great importance to the qualifications of the enrolled students, simultaneously trying to increase its own teaching potential. It will aim at meeting the requirements of the modern model of a third-generation university, and teaching in accordance with the most recent knowledge while addressing social requirements and expectations. The preparation of graduates to integration with local communities and understanding their needs are particularly relevant for the veterinary profession because animal treatment actually serves people. Veterinary surgeons protect people against zoonoses (70% of infectious diseases are common to animals and humans), ensure food safety and care for the hygiene of the processing of foodstuffs of animal origin, etc.

The Faculty intends to improve its research staff so that to achieve ever higher position in the parametric assessment, carry out research projects, obtain substantial international grants, including those involving higher prestige.

Higher education establishments are under growing pressure from the business, national and local governments to improve creation, transfer and implementation of knowledge. The strategy of the WULS-SGGW and, consequently, the strategy of the Establishment assumes development of the processes of knowledge transfer to the economy – to promote this field of the University's and Faculty's activity to eventually bring it at par with teaching and research.

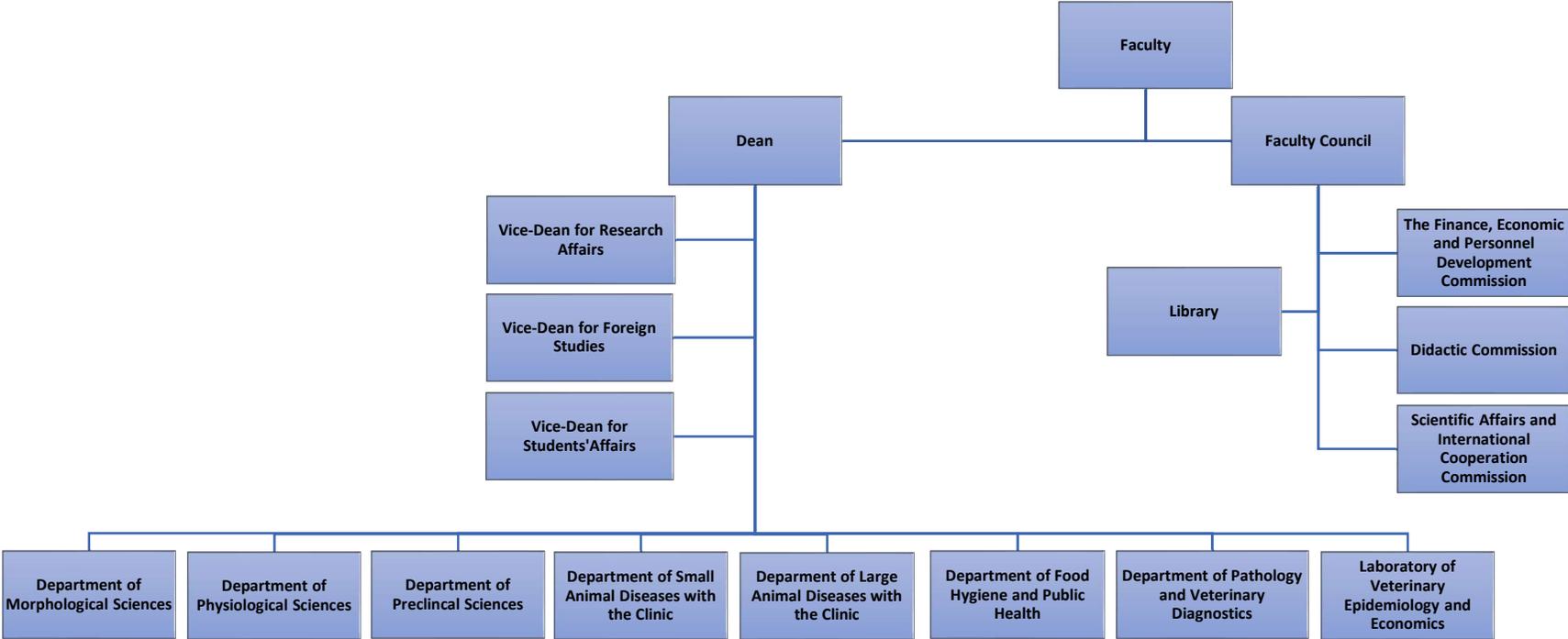
The Faculty intends to achieve the strategy assumptions mentioned above by simultaneous implementation of five strategic goals. Each of them contributes to the introduction of the strategy by its own way:

- Task 1: Teaching improvement – by strengthening and securing the competitive position of the Faculty in the education market;
- Task 2: Development of research – by improving the quality of the academic staff's activities, resulting in prestigious projects and significant research outcomes;
- Task 3: Expansion of cooperation and internationalisation – through more intensive inclusion of the University in international circulation of scientific ideas and academic exchanges, thus supporting the improvement of research, as well as through the development of learning opportunities;
- Task 4: Development of knowledge transfer to business – by strengthening the links between the Faculty and its business environment, and establishing conditions conducive to cooperation between both parties;
- Task 5: Ensuring funding and efficient administration – by meeting long-term economic needs and by getting support from efficient administrative services that assist the staff in their R&D activities and students in the learning process.

Joint and simultaneous performance of those tasks will allow the Faculty to implement the strategy and achieve the expected success. These tasks remain interlinked and make sense only when introduced concurrently, e.g. teach on a high academic level would be impossible without carrying out research at the same time. The experience in knowledge transfer to the economy also significantly enriches the teaching content by including practical aspects, thus helping the graduates to meet the requirements of the labour market. Strong cooperation with the business environment facilitates planning of attractive research projects. In addition, adequate dissemination of major scientific achievements is expected to contribute to attracting the interest of business entities and public institutions, thus enabling the development of cooperation with social partners.

Appendix 1.1.3. presents strategic objectives and their metrics, by perspective of the Balance Scorecard (BSC). Detailed description of these metrics is presented in *Słownik mierników Strategii SGGW do 2020 roku [Dictionary of 2020 WULS-SGGW Strategy metrics]*, developed as a separate executive document accompanying the WULS-SGGW Strategy as part of the work of the Rector's Development Committee.

1.1.4. Organisational chart (diagram) of the Establishment



1.1.5. List of departments/units/clinics and councils/boards/committees with a very brief description of their composition/function/responsibilities

For the list of departments/units/clinics and councils/boards/committees see 1.1.4

Faculty Council

According to the Higher Education Act and the University Statute, all groups of employees and students are represented in the Faculty Council:

- Dean – Chairperson
- Vice-deans
- Academic teachers with the title of Professor and doctors with a habilitation (post-doctoral) degree
- Representatives of other academic teachers
- Representatives of non-teaching staff
- Representatives of students
- Representatives of Ph.D. students

Major Competences of the Faculty Council

According to the Statute, Faculty Council:

- determines and supervises the main directions of the Faculty activities
- expresses the opinion of the academic community on matters vital for the Faculty and expresses opinions on matters referred by the Dean
- guards the high ethical level of university employees, Ph.D. students and students
- approves curricula and syllabi in cooperation with student government
- approves programs of Ph.D. studies
- approves programs of post-graduate studies
- supervises the quality of the teaching process
- evaluates the quality of research
- expresses opinions concerning scientific degrees and titles, including doctor honoris causa
- approves changes in the Faculty structure
- expresses opinions concerning hiring new employees
- establishes budget dispensation
- approves financial statements
- calls the Faculty Commissions
- approves Dean's annual reports
- evaluates Dean's activities
- decides in all matters vital for the Faculty (in accordance to the University Statute and Higher Education Act)

Faculty Commissions

Members of the Faculty Commissions are designated by the Dean and approved by the Faculty Board. Currently, there are three Commissions:

The Faculty Didactics and Teaching Quality Committee (FDTQC)

Commission Objectives:

- Evaluation of the projects related to the teaching curriculum for each study year
- Evaluation of the teaching process of the Veterinary Faculty
- Consideration and implementation of the initiatives aimed at introduction of more flexible and internationally oriented education
- Evaluation and assessment of teaching processes in other WULS-SGGW Faculties which involve the Faculty's employees
- Requests for awards for the Faculty staff and students related to extraordinary teaching and

academic achievements

- Evaluation of the social-economic conditions of veterinary medicine students
- Evaluation and planning of the Faculty's post-graduate studies
- Promotion of the Faculty through the involvement of faculty and students in both in-house and outside promotional events
- Consideration of teaching related ideas and opinions
- Other objectives set by the Commission Chairman

The Research and International Cooperation Commission

Commission Objectives:

- Evaluation of the quality of scientific research conducted by the Faculty
- Evaluation of the cooperation with other countries in the sphere of scientific research
- Assessment of the scientific research reports
- Assessment of WULS-SGGW grant requests
- Consideration of outstanding research achievement award requests
- Assessment, planning, and development of doctoral studies
- Evaluation of scholarship requests of doctoral candidates
- Performance evaluation of the Veterinary Medicine Student Association
- Activities related to the promotion of the Faculty
- Advancement of Commission proposals and assessments related to the scientific research

The Finance, Economic and Staff Development Commission

Commission Objectives:

- Preparation of distribution criteria for funding received by the Faculty and evaluation of financial and operational plans of the Faculty
- Assessment of the reports from completion of financial and operational plans
- Assessment of the repair plans and investment plans as well as reports from their completion
- Assessment and making of requests for national medals, honours, and other awards
- Evaluation of the Faculty support personnel
- Evaluation of the employees' social economic conditions and issues related to workplace safety
- Preparation of the proposals and opinions regarding financial, operational and employment related matters
- Other objectives outlined by the Commission's Chairman

Involvement of the veterinary profession and general public in the running of the Faculty:

There is a strong involvement of the official representatives of the profession in the running of the Faculty. The authorities of the Faculty maintain close links with the leadership of the National and Warsaw Veterinary Chambers (NVC and WVC). The majority of the academic staff, who are veterinarians, is members of WVC. Many employees are active in private practice in their spare time. Decisions vital for the functionality of the Faculty, including its educational mission, are made based on consultations with the National Veterinary Chamber. This approach is very helpful in maintaining the quality of education and in adjusting the teaching process to the actual requirements of the market.

1.1.6. Description of how and by who the strategic plan and the organisation of the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The structure and duties of the most important commissions are prescribed in the Statute of the University (section III, chapter 4 and 5). The Commissions are appointed by the Faculty Council on Dean's request.

In FTQAIS document of 2013, the Faculty's strategic objectives for the next seven years are defined. It was prepared by the Dean's Office with a broad participation from all members of the Faculty Council.

According to the section 2 of this document, new aspects can be proposed and added if discussed by Faculty Council. By 2020 at the latest, it should be reviewed and updated.

The strategy and timeframe of new solutions' implementation are regularly discussed during the meetings of the Faculty Council.

1.2. Comments

- The Establishment has a functional commission structure with good representation by all status groups. Currently perceivable risks are budget uncertainty, existing restrictions imposed by the legal framework (curriculum, changes in the law and administrative processes, staff etc.)
- Creating flexible clinical training positions is difficult due to legal restrictions and limited budgets.
- Faculty appointment procedures in the recent past have conclusively proved that there is an increasing shortage of young researchers entering a university career or applying for faculty positions.

1.3. Suggestions for Improvement

- Transparency of all processes will be further increased, and the processes frequently scrutinized.
- The Establishment will make an effort to streamline and simplify administrative structures and processes and to consolidate the internal organisational structure.
- Possible solutions to the lack of junior scientists and suitable applicants for faculty positions will be discussed with the university management and during meetings of the Assembly of Polish Veterinary Faculties.

2. Finances

2.1. Factual Information

The Establishment is a part of the WULS-SGGW. All the revenues are received and managed by the University and subsequently redistributed among various units.

The funds presently obtained by the Faculty, are adequate to sustain the educational program, to allow for adequate research and to meet the social objectives of the Faculty.

The Faculty has autonomy in how it deploys its funds. This includes some degree of freedom as to the number and deployment of staff (which have to be managed within its budget), as well as the level of their pay rate.

2.1.1. Description of the global financial process of the Establishment

WULS-SGGW acquires revenues from various sources and distributes them among faculties and interfaculty units.

Sources of income for teaching and research activities of the university:

a) for teaching purposes,

- funds from the national budget (Ministry of Science and Higher Education (MSHE))
- revenues from the establishment, including tuition and registration fees, as well as revenues from services and research activities,
- revenues from private bodies

b) for research purposes

- funds from the national budget (MSHE)
- revenues from research grants from MSHE, EU, industry, donation etc. (each research grant has separate accounting, and is closely controlled)

The basis for the division of the budget subsidy for teaching purposes and its allocation to faculties is an algorithm established by MSHE. It takes into account cost-absorptive coefficients. For the faculties involved in theoretical teaching (e.g. humanities disciplines), the coefficient is the lowest and amounts to 1. Veterinary medicine is one of a few disciplines which have the highest rating (the coefficient amounts to 5).

The distribution of incomes within the University is carried out in accordance with the resolution of WULS-SGGW Senate. Currently, the Faculty is supported with funds that cover 65% of costs necessary for annual salaries. The size of fund is calculated according to the level of employed academic teachers, the number of students, activity in student abroad exchange programs, the number of Ph.D. students, the number of research grants and competence to grant a Ph.D. and habilitation degree.

The funds for the research from the national budget are distributed among the faculties according to the position of a faculty on the national ranking list. The Establishment has an impressive scientific output and it is ranked in the highest evaluated group of faculties. Other rules of funds' distribution include: quality and quantity of scientific publications, revenues from research grants, services, revenues from organized meetings and conferences, and post-graduate studies.

The internal distribution of funds among the departments of the Faculty is determined by the Faculty Board on the basis of principles applied by WULS-SGGW and after comprehensive deliberation with the Faculty Financial Commission. Once 65% of the total sum of the funds obtained in the foregoing year are distributed, the remainder budget is divided out dependent on the number of qualified personnel, the number of teaching hours and the incomes gained from other sources. The funds for

the research are distributed according to the quality and quantity of scientific publications, revenues from research grants, revenues from organized meetings and conferences, and post-graduate studies, etc.

The funding of major equipment and its replacement is carried out gradually by the University and the Faculty from generated revenues. Larger equipment units are forwarded by application in the ordinary budget application or equipment grant application to the MSHE. Clinical (and other services) income is retained in full by the department providing the service. A part of this income is assigned for equipment purchase and repairment. The equipment for the research is usually purchased from research grants funds.

According to the Strategic Plan and schedule elaborated by the technical unit of WULS-SGGW and approved by the University Senate, larger extraordinary capital needs for work concerning building and major items are covered by WULS-SGGW revenues (including the University own assets obtained from selling the land).. For many years the priority has been the extension of the new campus at Ursynów. Besides, it is possible to apply for additional funds to the MSHE. The central administration of the University takes over 8 to 35 % (depending to source of incomes) of the revenues obtained by the Faculty for general overhead expenditures, building maintenance, energy, water-sewage service, additional staff for general cleaning, etc. The financial decisions of the Rector of the University are preceded by a discussion with the University Financial Commission and approval by the senate.

2.1.2. Degree of autonomy of the Establishment on the financial process

The Faculty has a global budget which consists of two components: the sum resulting from the University algorithm and additional incomes. The Faculty is responsible for managing the funds allocated to it. The expenditures for core personnel, administration, disposables, keeping animals and education are therefore covered. However, to assure financial security of the entire University, the Rector sets certain limits above which the Faculty requires Rector's approval.

2.1.3. % of overhead to be paid to the official authority overseeing the Establishment on revenues from services and research grants

Overhead paid to the University depends on the type of the revenue:

- 15% of research grants
- 10% of laboratory services
- 8% of clinical services

2.1.4. Annual tuition'n fee for national and international students

Faculty provides two tracks of full time study:

- no tuition fee
- partially paid

Candidates who fulfil requirements of the entry procedure but did not enter the no tuition fee list, can apply for the paid track. The tuition fee is 4 500 PLN (approx. 1100 €) per semester.

Tuition fee for foreign students studying in English is 3 800 € per semester.

2.1.5. Estimation of the utilities and other expenditures directly paid by the official authority and not included in the expenditure tables.

No utilities or other expenditures are paid directly by the University.

2.1.6. List of the on-going and planned major investments for developing, improving and/or refurbishing facilities and equipment, and origin of the funding

We plan to build a new feed storage for large animals located in Wolica, next to the Department of Large Animal Diseases. The investment will be financed by the University. The funds for planned Center for Regenerative Medicine which also will be located in Wolica come from the local government of the Mazowieckie Voivodship.

2.1.7. Prospected expenditures and revenues for the next 3 academic years

The Faculty expects the revenues in the next three years at similar level. The expenditures should not increase significantly as well. Some additional costs of unexpected renovations may appear.

2.1.8. Description of how and by who expenditures, investments and revenues are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

The Dean of the Faculty is personally responsible for managing Faculty budget. Dean's Office prepares documents necessary to plan Faculty budget for the forthcoming year and submits them to the Faculty Commission for Financial and Economic Affairs and Staff Development. At the end of the academic year the Dean of the Faculty submits annual financial report.

The Commission is an advisory and consultative body appointed to coordinate efficient financial administration of the Faculty. It is an independent body having the right to formulate opinions on the perspectives and development of the Faculty and its finances.

The Commission's basic tasks are:

- preparation of principles for the distribution of subsidies received by the Faculty and giving opinions on material and financial plans,
- giving opinions on reports on the implementation of the material and financial plans,
- giving opinions on renovation and investment plans and reports of their implementation

Based on these opinions, the Faculty Council approves material and financial plans of the Faculty and Dean's reports.

Table 2.1.1. Annual expenditures during the last 3 academic years (in Euros)

Area of expenditure	2017/18	2016/17	2015/16	Mean
Personnel	1,359,690	1,169,901	1,232,819	1,254,137
Operating costs	397,475	453,626	413,133	421,411
Maintenance costs	102,865	96,526	81,511	93,634
Equipment	308,142	54,491	48,832	137,155
Total expenditure	2,168,171	1,774,543	1,776,296	1,906,337

Table 2.1.2. Annual revenues during the last 3 academic years (in Euros)

Revenues source	2017/18	2016/17	2015/16	Mean
Public authorities	1,394,197	1,114,387	1,216,162	1,241,582
Tuition fee (standard students)	83,579	80,658	80,658	81,632
Tuition fee (full fee students)	394,402	355,653	356,269	368,774
Clinical services	104,370	64,107	67,963	78,813
Diagnostic services	18,104	15,494	14,737	16,112
Other services	5,471	3,183	2,086	3,580
Research grants	109,647	152,255	119,302	127,068
Continuing Education	101,026	97,957	99,741	99,575

Donations	0	0	0	0
Other sources**	0	0	0	0
Total revenues	2,210,797	1,883,695	1,956,919	2,017,137

** Please specify

Table 2.1.3. Annual balance between expenditures and revenues (in Euros)

Academic year	Total expenditures	Total revenues	Balance***
2015/16	1,776,296	1,956,919	180,623
2016/17	1,774,543	1,883,695	109,152
2017/18	2,168,171	2,210,797	42,625

*** Total revenues minus total expenditures

2.2. Comments

The total financial revenue of the Faculty and its institutions is considered sufficient to meet teaching needs, to support research activities and to assist in project applications aimed at securing the external funding. There are limited surplus funds which could be used strategically.

2.3. Suggestions for the improvement

A larger proportion of the surplus funds should remain in the clinics to give them independence in personnel planning for clinical services and specialization. It would also allow supplementation and/or replacement of the equipment used for clinical services and teaching.

3. Curriculum

3.1. Factual Information

3.1.1. Description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcome

The Faculty provides the country with comprehensive programs of veterinary medical education, research and service.

The Faculty's Educational Objectives:

The first educational objective is to provide a curriculum and the instructional resources necessary to enable students to obtain the professional title of lekarz weterynarii (Lek. wet., an equivalent of brit. Veterinary Surgeon, VS, and am. Doctor of Veterinary Medicine, D.V.M). The Faculty has sought to develop a curriculum that provides a strong foundation in veterinary medical sciences. It is expected that graduates will be well versed in fundamentals of veterinary medical sciences and will be able to meet the professional challenges they will encounter throughout their career.

The second educational objective is to provide further education opportunities for postgraduate veterinarians. The most gifted students can continue their education in a 4 year program of studies ending with a Ph.D. degree. For the veterinarians who already work in various fields of veterinary medicine, the Faculty provides post-graduate training leading to specialist diplomas.

The third educational objective is to encourage and provide continuing education opportunities for all graduate veterinarians. Today, no great potential in the veterinary profession can be achieved without engagement in the lifelong learning.

3.1.2. Description of the legal constraints imposed on curriculum by national/regional legislations and the degree of autonomy that the Establishment has to change the curriculum

In September 2011, Polish MSHE approved DESVetArcS. It specifies that curriculum of the Faculty of Veterinary Medicine should count at least 5,100 hours, 330 ECTS and studies should last at least 11 semesters. This new, species-oriented curriculum includes 165 hrs of equine diseases, 225 hrs of farm animal diseases, 210 hrs of dogs and cats diseases and 90 hrs of poultry diseases.

The National Curriculum determines the degree of freedom of the Faculty by limiting the number of hours that can be distributed in accordance with the Faculty vision. The Faculty has no influence on the total number of hours and minimal number of basic hours ascribed to individual subjects. These numbers can be increased, however, there are no additional funds from MSHE for that. Consequently, the Faculty has to cover all additional expenses associated with increased number of hours by itself.

All decisions on curriculum matters and course content have to be approved by the Faculty Council. The person responsible for a course elaborates detailed content of the course which should meet National Curriculum requirements. Then, this project is discussed by FDTQC and subsequently recommended to the Faculty Council.

Any change to the balance between the number of theoretical and practical teachings classes, as well as to the allocation of hours between various subjects have to be approved by the Faculty Council. The total number of teaching hours cannot be smaller than the number determined by the National Curriculum.

3.1.3. Description of how curricular overlaps, redundancies, omissions and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.

According to FTQAIS document, the system is monitored in respect of the Quality The timetable is developed each year by the Teaching Quality Officer. The timetable is approved by the Dean and thereafter by the appropriate resolution of the Faculty Council. The Vice-Dean for Students' Affairs and the Vice-Dean for the Foreign Studies, in consultation with the Teaching Quality Officer prepare, the risk analysis for the teaching quality process, annually. After being reviewed by FDTQC, both Vice-Deans submit the proposals of timetables to the Dean, and the Dean introduce them to the Faculty Council. Any conflicts and incidents are resolved by the Dean, who may delegate his authorities in this regard to other individuals.

The system is assessed, analysed and improved through periodical reviews conducted by the Teaching Quality Officer. Having consulted FDTQC, the Officer submits a review report to the Faculty Council, every academic year.

3.1.4. Description of the core clinical exercises/laboratory classes/seminars prior to the start of the clinical rotations

Formal prerequisite for the participation in the clinical rotation of the 5th year of study is regular and successful involvement in the required courses and extramural internships (EPT) of the pre-clinical and clinical part of the curriculum. Clinical core subjects in the 3rd, 4th and 5th years of the study include general surgery and anaesthesiology, diagnostic imaging, clinical and laboratory diagnostics, farm animal diseases (infectious diseases, reproduction, surgery, internal medicine), equine diseases (infectious diseases, reproduction, surgery, internal medicine), dog and cat diseases (infectious diseases, reproduction, surgery, internal medicine), avian diseases, as well as 160 hours of EPT in a veterinary practice.

3.1.5. Description of the core clinical rotations and emergency services and direct involvement of undergraduate students in those activities

All 5th and 6th year students are divided into small groups (8 or less students) and rotate through the large and small animal clinics and practice reproductive medicine, infectious diseases, internal medicine, surgery, avian diseases, parasitology and laboratory diagnostics (a total of 330 hours, for details see Table 3.1.5). During rotation students participate in regular clinical duties, are actively involved in in-patient and ambulatory work, attend seminars and exercises on practice relevant topics and compile their own case reports. It is expected that the students apply their acquired knowledge in a problem-based approach and practise recognising the clinical problems, developing the diagnostic and therapeutic plan as well as practice the relevant hands-on skills.

In the academic year 2017/18, a group of 56 students had a chance to participate in the summer holiday internship named POWR which was funded from the National Centre for Research and Development grant. It is a 120-hour training payable to the student and external stakeholder.

3.1.6. Description of teaching in slaughterhouses and in premises for production, processing, distribution/sale or consumption of food of animal origin

In the courses of food hygiene and public health protection courses, a part of the classes constitute theoretical lectures and another part includes practical training.

Within the course of "Meat Hygiene" students experience 25 hours of practical training in slaughterhouses, located 30-60 km away from Warsaw. The training visits are organized 12 times a year (11 visits x 2h + 1 visit x 3h). The classes are mainly dedicated to the practical teaching of ante mortem and post mortem veterinary inspection. Students work in groups of 14 under the supervision of one teacher. Every student is given the opportunity to achieve manual proficiency in post mortem veterinary examination of carcasses.

Within the course of "Hygiene of Food of Animal Origin", IMS students receive annually 6 hours of practical training in fish processing plants (2 visits x 3h) while Polish-speaking students visit a cold storage warehouse (1 visit x 3h). Students work in groups of 15 under the supervision of one teacher. Within the course of "Feed Hygiene", IMS students get 10 hours of practical training in the field of feed production and control which are divided into two visits per year (1 visit/4h; 1 visit/6h). Students visit National Reference Laboratory in Veterinary Institute in Pulawy (Department of Hygiene of Animal Feeding stuffs) and business operator processing feed additives used in composed feeds. Every student performs 2 plant visits. Students are guided by the employees of the institutions and are supervised by teachers. Group size under one teacher supervision is 15 persons.

In addition to these courses, there are summer extramural trainings listed in the table 3.1.4.

Extra-mural trainings on summer holidays, are supposed to be reported by students in their books of practical training. After the training, students are examined by teachers of the Department of Food Hygiene and Public Health. The marks are put in their credit books.

3.1.7. Description of the selection procedures of the Electives by the students and the degree of freedom in their choice

The National Curriculum has 330 ECTS points. According to DESVetArcS, 30% of these ECTS points must be covered by elective courses. In each year of study, there is a minimal number of hours which every student is obliged to fill with elective courses (described in appendix 3.1.7). Students can choose more than obligatory number of hours however, all extra hours have to be paid (~20 € for 1 ECTS). The registration process is available within the first two weeks of each semester. Registration is handled by the eHMS system (electronic Deans Office platform). The list of attendance is closed when the last available place is booked. A minimum of 14 registered persons is required to run the elective. If the elective requires a small group of students the list is divided to 7-8 persons groups. Some of the electives are limited to specific number of attendees, some are not limited.

Students can perform individual research projects as the elective subject or as a form of the activity within the research circle (see chapter 10). There are differences in the list of proposed electives for Polish and international students (see appendix 3.1.7.). That is due to:

- Different requirements of students due to the specificity of their origin
- Consultations with students revealed different demand for electives and their volume, e.g. the course of Small Animals Surgery for Polish and English Division amounts to 45 and 15 hours, respectively
- Although the range of electives offered for Polish students is very wide, the student never decide for some of them, so they are systematically removed from the catalog of electives
- The variety of electives is dependent on current financial resources for didactics. Thus, the funds for Polish didactics are very limited in comparison to funds for IMS students.

3.1.8. Description of the organisation, selection procedures and supervision of the EPT

The content and duration of the EPT (see Table 3.1.4.), as well as the prerequisites for training institutions are provided in DESVetArcS. During the EPTs students are expected to spend 80 hours of practical non-clinical training (breeding practice), 160 hours of veterinary inspection training and 320 hours of clinical training. Students may choose the EPT organizing facility either from the list proposed by the Deans Office or they may choose another facility which is then verified by the Faculty to meet standards for hosting the students. There are contractual agreements between the Faculty and the training providers. Practical checks on the quality of teaching (and the accommodation and alimentation on breeding practices) are carried out on all types of EPT.

3.1.9. Description of the procedures used to ascertain the achievement of each core practical/clinical activity by each student

The achievement of core practical/clinical activities is ascertained by:

First Day Skills Diary (FSDS)

The students are obliged to confirm the collection of 51 skills which include:

- keeping the medical records
- clinical skills
- skills related to FSQ

The skills are confirmed by a signature and stamp of the teacher or authorized veterinarian.

. For each skill there are four rubrics to fill. The minimum of two different species must be included in regards to each activity.

A part of FSDS is the Diary of the Veterinary Student where the students report the most interesting case they assist.

Student's daybook of summer practice and clinical training (SDSPCT)

Students describe in details clinical cases and activities which they had a chance to practice during FSQ and breeding trainings, as well as during rotations. Each of these activities is verified, evaluated and authorized by a teacher responsible for particular internships.

Rotation Reports

During rotations the students prepare Rotation Reports. The reports include written description of issued discussed during training. They might be a kind of research paper. To get a credit for the rotation, the Rotation Report must be approved.

In addition, to pass the clinical rotations in small and large animals it is necessary to attend a night shift in the clinics.

3.1.10. Description of how and by whom the core curriculum is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

There is a procedure of "The faculty teaching quality assurance and improvement system" (FTQAIS) which describes the teaching content and effects. 1,270 h are given to the Faculty to be managed. The Faculty decided to allocate them mainly to: the humanities, additional courses (related to veterinary medicine) and electives. Each of the courses, including the responsible teacher and the content) are approved by the Faculty Council as indicated in FTQAIS. The program of each course is published on the official webpage of the Faculty. The content and the expected effects of the course are described in syllabuses. A teacher responsible for a course fills a university form (WEK – verification of teaching effects paper) at the end of each semester.

- The forms are analyzed by Vice-Dean for Students' Affairs, as well as by the Faculty and University Teaching Quality Officers
- Questionnaires filled by students are regularly analyzed by the Faculty Teaching Quality Officer, and the conclusions are presented during a meeting of Faculty Council.

Based on the results of the analysis of both questionnaires, interventive inspections are conducted if necessary. The verification of teaching is carried out in accordance with FTQAIS Chapter 3, section 5.4, subsection g.

Table 3.1.1. Curriculum hours in each academic year taken by each student
Academic years* A B C D E F G H

	Year	Hours of training						Other (G)	Total
		Theoretical training		Self-directed learning* (C)	Supervised practical training				
		Lectures (A)	Seminars (B)		Laboratory and desk based work (D)	Non-clinical animal work (E)	Clinical work (F)		
a	First	414	0	142	44	60	0	90	750
b	Second	452	5	158	105	0	0	120	840
c	Third	496,5	51	46	58	52	71,5	60	835
d	Fourth	468	14,5	35,5	18	67	172	0	775
e	Fifth	468,5	35,5	12,5	47	58	186	0	807,5
f	Sixth	44	2	12	27,5	8,5	164	0	247,5
g	Total mandatory subjects (a-f)	2343	106	406	299,5	237	593,5	270	4255
h	EPT	-	-	-	-	240	320	-	560
i	TOTAL (g+h)	2343	106	406	299,5	477	913,5	270	4815**
j	Total required electives	types of training differ in different electives***							435
TOTAL Curriculum (g+h+j)									5250

A: lectures; B: seminars; C: supervised self learning; D: laboratory and desk based work, E: non-clinical animal work; F: clinical animal work; G: others (specify); H: total

* An academic year may be subdivided into 2 semesters

** includes all mandatory subjects and all EPT, not including minimum electives required

*** total hours of different types of training depends on the students choice of electives

Table 3.1.2. Curriculum hours in EU-listed subjects taken by each student

	Subject	Lectures	Seminars	Supervised self learning	Laboratory and desk based work	Non-clinical animal work	Clinical animal work	Others (elearning)	Total
Basic subjects	Medical physics	30							30
	Chemistry (inorganic and organic sessions)	22,5		7,5	15				45
	Animal biology, zoology and cell biology	50		10					60
	Feed plant biology and toxic plants 1								
	Biomedical statistics	22		2	6				30
Basic Sciences	Anatomy, histology and embryology	138		162		60			360
	Physiology 2*	105		30	45				150
	Biochemistry	75		15	45				135
	General and molecular genetics	30							30
	Pharmacology, pharmacy and pharmacotherapy	89	36		10				

	Pathology ₃	150	15	36	15	39			255
	Toxicology	42	3	11	2	2			60
	Parasitology	75		10	20				105
	Microbiology	90		40	20				150
	Immunology ₄	50	20	5					75
	Epidemiology	20		5	5				30
	Professional communication ₅								
	Professional ethics ₆								
	Animal ethology ₇	30							
	Animal welfare ₇								
	Animal nutrition	59	13	6	12				90
Clinical Sciences	Obstetrics, reproduction and reproductive disorders ₈	94			4	24	83		205
	Diagnostic pathology	36	4	8		12			60
	Medicine and surgery including anaesthesiology ₉	427,5			2	63	157,5		650
	Clinical practical training in all common domestic animal species	28	4		31	16,5	235,5		315
	Preventive medicine	45			8	6	16		75
	Diagnostic imaging	40					20		60
	State veterinary services and public health ₁₀	45							45
	Veterinary legislation, forensic medicine and certification ₁₁	52,5	22,5						75
	Therapy in all common domestic animal species ₁₂								
	Propaedeutics of all common domestic animal species ₁₃	78			6		36		
Animal Production	Animal Production and breeding ₁₄	75							75
	Economics	15							15
	Animal husbandry ₁₄								
	Herd health management	30		12	12		21		75
Food Safety and Quality_{15**}	Inspection and control of food and feed	90			18,5				108,5
	Food hygiene and food microbiology	90	3		26				119
	Practical work in places for slaughtering and food processing plants					20,5			20,5
	Food technology including analytical chemistry	30	2		7,5				39,5
Professional Knowledge	Professional ethics & behaviour _{6,9}								
	Veterinary legislation ₁₆								
	Veterinary certification and report writing ₁₇								
	Communication skills ₉								
	Practice management & business _{11,18}								
	Information literacy & data management			18				12	30

1) executed as a part of electives of Clinical Toxicology,

2) executed as a part of Physiology and Cell Physiology

3) executed as a part of Pathomorphology and Pathophysiology

4) including Clinical Immunology

5) executed as a part of Clinical Animal work belonging to the group of courses: Medicine and Surgery including Anaesthesiology

6) executed as a part of the course of History of Veterinary and Deontology

7) executed as a part of Ethology, Welfare and Animal Protection

8) executed as a part of Animal Reproduction and Andrology

9) executed as a part of following courses: Avian Diseases, Fur Animals Diseases, Bee Diseases, Fish Diseases, Internal and Infectious Diseases and Surgery of Horses, Livestock and Small Animals

10) executed as a part of the courses of Zoonosis, Response to public health related disasters

11) executed as a part of the courses of Veterinary Administration and Veterinary Jurisprudence

- 12) executed as a part of Pharmacology and courses of the group of clinical sciences
 13) executed as a part of Clinical diagnostics
 14) executed as a part of the courses of Animal husbandry and breeding and Technologies in animal production
 15) a set of courses executed within the framework of: Feed hygiene, Meat hygiene, Hygiene of food of animal origin
 16) executed as a part of the courses of Veterinary Administration and Veterinary Jurisprudence
 17) executed as a part of clinical practical training in all domestic animal species
 18) executed as a part of Veterinary Economics

*) In case of International Students the course is executed as an elective

***) Differences in the number of theoretical vs practical hours for International Students in comparison to Polish Students (the course of Feed hygiene)

Table 3.1.3. Curriculum hours taken as electives for each student

	Subject	Lectures	Seminars	Supervised self learning	Laboratory and desk based work	Non-clinical animal work	Clinical animal work	Others (language skills)	Total
Basic Sciences	Ecophysiology PL	30							30
	Psychology PL	30							30
	Bioethics PL	30							30
	Negotiations	30							30
	Intercultural communication PL ENG	30							30
	Bases of the law PL	30							30
	Aquaculture and exotic animals care PL ENG	30							30
	Breeds and varieties of dogs and cats ENG	15							15
	Comparative anatomy ENG					45			45
	Physiology of exercise PL ENG	30							30
	Physiology of development PL	30							30
	Advances in biomedical sciences - joint course PL ENG	15							15
	Bases of genetic diagnostics PL	10				5	5		20
	Molecular basis of feed effects on health PL	15							15
	Molecular cell physiology (ENG)	30							30
	Calculus (ENG)	7				8			15
Polish language (ENG)							30	30	
Clinical Sciences	Bacteriological and mycological laboratory diagnostics of skin infections in dogs and cats PL	5	5		4		1		15
	Veterinary virology PL ENG	15							15
	Mechanisms and development of antimicrobial resistance in bacteria PL ENG	15							15
	Disease diagnostics in swine herd PL	15							15
	From symptoms to diagnosis. Diagnostics and treatment algorithms in selected skin diseases of dogs and cats PL	15							15
	Applied pharmacology of livestock and horses PL	15							15
	Experimental immunology (ENG)	6	6		3				15
	Applied pharmacology of small animals PL	15							15
	Clinical immunology PL ENG**	15	15						30
Radiographic anatomy of dog and cat (ENG)		15						15	

	Clinical and functional neuroanatomy in dogs and cats (ENG)					15			15
	Clinical haematology (ENG)	3				12			15
	Clinical and laboratory diagnostics in emergency veterinary medicine PL ENG**	25			5				30
	Clinical toxicology of small animals PL ENG**	30							30
	Clinical toxicology of large animals PL ENG**	30							30
	Cardiology diagnostics in small animals PL ENG**	30							30
	Veterinary border control (ENG)	6	3		6				15
	Reptile and amphibian dietetics (ENG)	15							15
	Behavioural medicine of cats and dogs PL ENG	30							30
	Small animal bone and joint surgery PI ENG		6			6	18		30
	Disease diagnostics in exotic animals PL ENG	12			5	3	10		30
	ECG in small animals PL	10			20				30
	Veterinary of pig herd (ENG)						13		15
	Veterinary of the racing horse (ENG)						15		15
	Identification and treatment of honeybees diseases PL	18	0,5		4,5		7		30
	Cardiology in practice PL	4					26		30
	Surgery of genital organs of dogs and cats (solo castration) PL ENG						15		15
	Clinical course of small animal surgery PL ENG**	15					30		45
	Neonatology PL	15							15
	Ultrasound diagnostics in companion animals PL ENG**						35		35
	Differential diagnostics based on laboratory results PL ENG**	15			15				30
	Small animal dentistry PL ENG**	10				10	10		30
	Intensive care of dogs and cats PL ENG**	30							30
	Ultrasound diagnostics of the reproductive tract in farm animals PL ENG*	10					20		30
	Exotic animals medicine PL ENG**	30	23		3	3	1		60
	Ophthalmology in small animals PL ENG	3	2			6	4		15
	Veterinary oncology PI ENG**	26					4		30
	Daily clinical practice (ENG)		5		10				15
	Small animal dermatology (ENG)	6					9		15
	Equine diseases - clinical cases (ENG)						15		15
	Common surgical procedures in horses (ENG)						15		15
	Mastitis prevention and treatment in dairy herds (ENG)	5			5		20		30
	Horse dentistry (ENG)	9					6		15
	Imaging diagnostics in companion animals (ENG)						15		15
	Management of life-threatening situations in small animal anaesthesia (ENG)	5	10						15
	Communication and negotiation skills in veterinary practice (ENG)	9			6				15
	Clinical course of exotic animal diseases (ZOO) (ENG)	11	8		2	2	7		30
	Introduction to cynology and dog show essentials (ENG)	12			3				15
	Hoof management in cattle (ENG)						15		15
	Small ruminants' diseases (ENG)	5					25		30
	Horse arthroscopy (ENG)	8					7		15
Food Safety and Quality	Examination and evaluation of wild game animals PL	30							30
	Management of seafood quality and safety ENG	15							15
	Nutraceuticals in farm animals ENG	15							15
	Management of food quality and safety ENG	15							15
Professional Knowledge	Management of veterinary practice PL ENG **	30							30

A: lectures; B: seminars; C: supervised self learning; D: laboratory and desk based work, E: non-clinical animal work; F: clinical animal work; G: others (specify); H: hours to be taken by each student per subject group

*) Differences in theoretical vs practical hours for IMS students in comparison to polish students

***) Differences in curricular hours between IMS students in comparison to polish students

Because of the specificity of the curriculum students do not choose electives per subject group. Details are present in appendix 3.1.7

Table 3.1.4. Curriculum days of External Practical Training (EPT) for each student Subjects Minimum duration (weeks), Year of programme

Subjects		Minimum duration (weeks)	Year of programme
pre-clinical	Breeding practice	2 weeks (80 hours)	After 2 nd year
clinical	Clinical practice (private practice or clinic; companion animals or production animals)	4 weeks (160 hours)	After 4 th year
	Clinical practice (private practice or clinic; companion animals or production animals)	4 weeks (160 hours)	After 5 th year
FSQ & VPH	Veterinary inspection practice	2 weeks (80 hours)	After 4 th year
	Veterinary inspection practice	2 weeks (80 hours)	After 5 th year

Table 3.1.5. Clinical rotations under academic staff supervision (excluding EPT)

Types	List of clinical rotations (Disciplines/Species)	Duration (hours)	Year of programme
Intra-mural (VTH)	Dog and cat diseases	60	5
	Farm animal diseases	4	5
	Equine diseases	22	5
	Avian Diseases	14-17*	5
	Parasitology	15	5
	Clinical laboratory diagnostics	15	6
Ambulatory clinics (Farms and shelters visits during clinical rotations)	Dog and cat diseases	25	5
	Farm animal diseases	81	5
	Equine diseases	63	5
	Avian diseases	3-6*	5
FSQ & VPH	none	n/a	n/a
Electives	none	n/a	n/a
Other (specify)	none	n/a	n/a

*number of hours in ambulatory clinics in Avian diseases rotation are different due to the capabilities of individual facilities

More details are provided in appendix 3.1.5.

Table 3.1.6. Optional courses proposed to students (not compulsory)

In years 2017-2019, a summer holiday internship named POWR was funded from the National Centre for Research and Development grant. It includes additional 120 hours of clinical training payable to the student and external stakeholders.

3.2. Comments

- A part of senior personnel does not speak English. Therefore, sometimes the same courses are run by different teachers for Polish and English-speaking students. This is also why some courses might have different schedules, including different number of lectures and lab classes.

3.3. Suggestions of Improvement

- Starting from the 1st of October 2019, a new regulation which manages the functionality of higher education in Poland came into force. The Faculties of Veterinary Medicine are currently preparing a project of new teaching quality standards for veterinary medicine studies. According to the new proposal, the contribution of clinical classes shall enhance and the count

of ECTS shall increase from 330 to 360. It should improve the present status, i.e. the dominance of basic sciences courses over the clinical courses.

4. Facilities and equipment

4.1. Factual Information

4.1.1. Description of the location and organisation of the facilities used for the veterinary curriculum

The Faculty of Veterinary Medicine occupies three buildings located at the Main Campus of the University. These are building 23 shared with the Faculty of Animal Sciences, building 24 where the Dean's Office is located and building 22, the Small Animal Clinic. Buildings 23 and 22 are new. The construction was completed in 2001/2002, whereas building 24 is 35 years old and recently was remodelled and renovated with the financial support from the European Fund of Regional Development. In the Bldg. 23, on the 3rd floor, the Department of Preclinical Sciences is located. The Department of Physiological Sciences, The Department of Morphological Sciences and The Department of Food Hygiene and Public Health are in Bldg. 24. The Department of Large Animal Diseases with the Clinic is located in Wolica, approx. 1.5 km from the Main campus (see map, page 38). The diagnostic field station serving educational purposes is located at the WULS-SGGW Farm Obory near Warsaw (approx. 13 km away). The Campus map and localization of the premises used for the veterinary curriculum are provided in the Appendix 4.1.1.

Surface area of the facilities used for the veterinary curriculum

Building	Total surface	Surface under FVM administration		
		Total	For lecturing	For practical teaching
22	7730	3706	1117	309
23	19533	2819	0*	465
24	9259	8446	0*	851
Wolica	4694	3034	408	802

*All rooms used for lecturing are under WULS-SGGW administration or are subject to other Faculties

4.1.2. Description of the premises for:

-) lecturing
-) group work
-) practical work

The Faculty has a large number of lecture halls, seminar rooms, laboratories and clinic facilities where veterinary medical training is carried out. The lecture halls and seminar rooms are fitted out with media technology – computers, projectors and internet connection. The libraries and common rooms in the individual institutes and clinics are available to students for individual study, in particular for rotation students during case work elaboration. The equipment available in the rooms matches the requirements of each subject. The laboratories, dissecting and autopsy halls are signposted with safety information, escape route and emergency exit signs in accordance with the infection protection law, biomaterial ordinances, genetic engineering law, genetic engineering safety ordinances, occupational safety law and internal Faculty hygiene rules. In addition, if necessary the rooms are equipped with hand washing and hand disinfection facilities, eye washing stations, emergency showering facilities, first aid kits and fire extinguishers.

The room assignment for the regular courses in the curriculum is done by the Dean's office. In addition, the lecturers can view room availability through the internet and request additional bookings to be made by the Dean's office.

Details are provided in the Appendix 4.1.2.

4.1.3. Description of the premises for housing:

-) healthy animals

-) hospitalised animals

The Faculty has sufficient space to accommodate the animals involved in clinic and teaching activities. These are subjected to a number of legal requirements including "The Act on the protection of animals used for scientific or educational purposes". The animals kept for educational purposes must be registered with the appropriate authority, the Ministry of the Environment, for a breeding and/or keeping permit. For all animals kept for educational purposes a suitable and species-appropriate animal care by qualified personnel under supervised by animal welfare officers is provided. The appropriate quarantine facilities exists. Over and beyond the requirements of animal protection law, the obligations of biomaterial ordinances, of genetic engineering law and of infection protection law is met. In accordance with the law on genetic engineering, a responsible project leader and an official responsible for biological safety is named. In case of infection the trial is conducted, then those components of infection protection law which relate to safety precautions are observed and a qualified person undertakes necessary responsibility. Appropriate records are kept and checked by the licensing authorities. Details are provided in appendix 4.1.4.

-) isolated animals

The Clinic for Small Animals includes a separate hospital for patients diagnosed with infectious diseases. The Clinic for Large Animals owns two separate equine boxes for animals with infectious diseases. The boxes have a separate access and insulated form the main building. In both clinics, there are procedures to follow in case of suspension of an infectious disease. The protocols include the full range of proceedings starting from the admission of a patient up to its isolation of the animal for observation and/or treatment in the detached part of the hospital.

Places available for hospitalizations:

	Species	Number of places
Regular hospitalization	horses	34
	dogs	30
	cats	20
	pets and wildbirds	37
Isolation facilities	farm animals and horses	2
	small animals	22
	pets and wildbirds	25

4.1.4. Description of the premises for:

-) clinical activities

The Faculty has sufficient space to conduct clinical activities necessary for teaching purposes. That includes consulting rooms, ambulatory rooms, some laboratory rooms and diagnostic with special technical equipment, such as X-ray or CT rooms. Details are provided in the Appendix 4.1.4.

Premises for clinical work and student training

Small animals	no. of consulting rooms	19
	no. of surgical suites	12
Equine and food animals	no. of consulting rooms	7
	no. of surgical suites	1
Exotic pets small mammals and reptiles	no. of consulting rooms	2
	no. of surgical suites	2
Pet and wild birds	no. of consulting rooms	1
Poultry	no. of consulting rooms	1
Bee	no. of consulting rooms	1
Pathology	no. of consulting rooms	1

-) diagnostic services including necropsy

A broad range of diagnostic services as well as scientific equipment are offered by the Establishment. Details are included in appendix. 4.1.4.

-) FSQ & VPH

List of slaughterhouses and meat processing plants and their location in particular Districts are presented in appendix 4.1.4.

4.1.5. Description of the premises for:

-) study and self-learning

There are 55 places in the reading room of the Faculty Library, five of them with computers hooked up to the internet, and 600 places in the Main WULS-SGGW Library. In the most buildings of the Campus Internet can be accessed via EDUROAM network.

-) catering

There are two cafeterias available in the buildings used for veterinary curriculum where students can purchase hot or cold snacks and drinks, as well as warm meals. They are located in the Building 23 and Building 24. There are also another cafeterias located in different buildings under administration of other Faculties. Vending machines with cold drinks and snacks are available in every building of the Campus

-) locker rooms

Locker rooms for students are available in the Small Animal Clinic. In buildings 22, 23 and 24 general access cloak rooms are available.

-) accommodation for on call students

In each clinic there is a common room as well as a bathroom with a shower and a toilet which are provided for students while they are on-call or while on the night shift.

-) leisure

WULS-SGGW provides facilities not related directly to teaching program which include:

- dormitories
- sporting facilities: indoor arena, indoor swimming pool, indoor and outdoor tennis court, soccer field

- cultural organizations
- health care facility

The University Sports Centre offers a wide range of sport classes and physical activities for both students and employees.

4.1.6. Description of the vehicles used for:

-) students transportation

The Establishment operates 1 vehicle which, if necessary, is used for student transport mainly during extramural activities. If larger vehicles are necessary, FVM uses buses which remain under WULS-SGGW administration (16 to 50 seats).

-) ambulatory clinics

The Faculty possesses one ambulance which is used by teachers and students for on-calls and to get to some clinical classes. The ambulance is equipped with medical devices and it may haul a trailer for animal transportation.

-) live animals transportation and cadavers transportation

Since the transportation of live animals and carcasses is strictly regulated by legal requirements and it can be performed only by specialised companies, if it is necessary, FVM hires proper licensed carrier.

4.1.7. Description of the equipment used for

-) teaching purposes

A large range of text books (available at the library), lecture notes and presentations are used for teaching. E-learning courses are provided on the MOODLE Platform. All classrooms used for practical teaching are equipped with proper instruments such as microscopes (Histology, Microbiology, Parasitology) and other equipment necessary to perform practical training in each discipline. All equipment used for clinical services are also employed in practical clinical teaching.

-) clinical services

See details provided in Appendix 4.1.4.

4.1.8. Description of the strategy and programme for maintaining and upgrading current facilities and equipment and/or acquiring new ones.

The continual improvement and further concentration of the infrastructure follows the central strategy of the Faculty and the University. Smaller maintenance costs are covered by the Faculty, large construction projects are negotiated and budgeted as part of the target agreements with university management. The objective of the Establishment is to maintain the infrastructure that meets the operational needs of the institutions and clinics. Internal audit visits are considered an important tool carried out within the framework of biosecurity, work safety and fire safety. The audits are jointly conducted by the members of the University Occupational Safety Service and Fire Safety Office. The

post-inspection reports are submitted to the Dean who then orders appropriate corrective actions (if necessary).

4.1.9. Description of how and by whom changes in facilities, equipment and biosecurity procedures are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Desired construction projects (ranging from small building maintenance to large new constructions) are brought to the Dean's Office by different routes, such as:

- legal requirements
- requests from technical building management
- requirements from internal audit inspections
- users' requests

The applications are collected, evaluated, compared to the strategic plan and processed according to priority. Larger construction works financed by the University budget are presented to the Faculty Council and must be approved by the Senate of the University. The details of new and ongoing construction works are discussed and decided during construction meetings with the University Engineering and Utilities division. Ongoing and upcoming construction activities are communicated to the Faculty Council.

The assessment of the occupational safety and health (OSH) conditions is conducted systematically by the OSH Inspectorate and the WULS-SGGW Fire Prevention Inspectorate. The inspectors provide the Dean with Inspection Protocols identifying any inadequacies. The Dean orders the appropriate head of department to take corrective action. The regulations and instructions concerning OSH are available on website: https://intranet.sggw.pl/intranet/?q=taxonomy_menu/3/38.

There is a post of a coordinator of biosecurity and biohazard at the Faculty. The main duty of the coordinator is to supervise the compliance with the OSH regulation, in particular in regards to biomedical regulation. On the webpage of the Faculty, there is a link to "Biosecurity" where all safety rules, hazards' types and the instruction on how to communicate the hazards are presented in details.

4.2. Comments

- The Faculty is divided into two parts what generates some logistic challenges.
- The building 24 is 45 years old; although it has been renovated recently, it generates high maintenance needs.
- Some premises are under University administration what may occasionally generate certain problems

4.3 Suggestions for improvement

- Some renovation of the Building 24 is necessary
- Some audiovisual equipment needs replacement

5. Animal resources and teaching material of animal origin

5.1. Factual Information

5.1.1. Description of the global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences

The Establishment ensures high educational value of teaching which is under regularly improvement. The Curriculum is being updated on a regular basis according to students' expectations, needs of the job market and novel scientific research. The Establishment has enough resources to organize classes with live animals and material of animal origin. Particular attention is paid to make sure that students will acquire "Day One Competences". The classes with animals are being held along with Directive 2010/63/EU and animals welfare is maintained.

5.1.2. Description of the specific strategy of the Establishment in order to ensure that each student receives the relevant core clinical training before graduation, e.g. numbers of patients examined/treated by each student, balance between species, balance between clinical disciplines, balance between first opinion and referral cases, balance between acute and chronic cases, balance between consultations (one-day clinic) and hospitalisations, balance between individual medicine and population medicine

The aim of classes held in the Clinics is to acquire skills in the area of diagnosis, interpretation of diagnostic tests, treatment and prevention of diseases occurring in various animal species. The coordinators of each module are responsible for implementing proper practical education and exchange of educational aims between divisions of the department. Necessary changes are identified from the feedback information, e.g. surveys among students. Acquiring practical skills is crucial to graduate and is confirmed in FSD report card.

5.1.3. Description of the organisation and management of the teaching farm(s) and the involvement of students in its running

The Establishment does not operate its own agricultural training farm however, it has constant cooperation with the Agricultural Experimental Farm (RZD) Wilanów-Obory (auxiliary farm of WULS-SGGW) ensuring proper veterinary care for the animals kept on the farm. At the same time, the students acquire practical skills in the fields of animal breeding, nutrition, welfare, diagnosis and treatment of diseases.

5.1.4. Description of the organisation and management of the VTH and ambulatory clinics

Small Animal Clinic:

The Small Animal Clinic is opened 24/7. There are three shifts. Morning shift operates between 8 a.m. and 2 p.m., afternoon shift from 2 p.m. to 8 p.m. and a night shift from 8 p.m. to 8 a.m.*

The morning shift from Monday to Friday involves:

- two veterinarians with two nurses for general consultations, emergencies and intensive care
- one surgeon for surgical consultations
- one radiologist with one anaesthesiologist and one nurse for diagnostic imaging (x-ray, CT, ultrasound, fluoroscopy)
- 2-3 surgeons with 2 anaesthesiologists and 2 nurses for scheduled surgical procedures
- one veterinarian for reproductive tract surgeries and its follow-up
- one surgeon on-call for emergency surgeries

- internal laboratory services (CBC, multiple biochemical panels, CSF fluid analysis, urinalysis, microbiology, pathology, parasitology)
- external laboratory services (for services not available in the internal lab)

The afternoon shift from Monday to Friday and on weekends involves:

- two veterinarians with one nurse for general consultations, emergencies and intensive care
- one surgeon for surgical consultations
- one radiologist for diagnostic imaging (x-ray, CT, ultrasound, fluoroscopy) (anaesthesiologist if needed)
- 1 surgeon with 1 anaesthesiologist (if needed)
- one veterinarian for reproductive tract surgeries and its follow-up
- one surgeon on-call for emergency surgeries
- internal laboratory services (haematology, microbiology, pathology) (Mon-Fri to 6 p.m., Sat-Sun 10 a.m.-to 2 p.m.)
- external laboratory services (for services not available in the internal lab)

At the night shift there is one veterinarian on duty with one student.

Specialised consultations are available from Monday to Friday. They include: dentistry, ophthalmology, oncology, reproduction and obstetrics, soft tissue surgery, bone and joint surgery, cardiology, endoscopy and gastroenterology, dermatology, neurology and exotic pets and birds.

Post-op and intensive care patients are hospitalised.

Students participate in the clinical work during Small animal diseases panel (internal medicine, surgery, reproduction, infectious diseases) and during Small Animal Rotations.

*In the years 2015-2018 night shifts with one veterinarian (and possibly one volunteer-student) were organized only when the postoperative patients needed intensive 24h care (no incoming patients were admitted at nights). From 2019 incoming patients are also admitted during night shifts.

Large Animal Clinic:

Horse Clinic is opened 24/7.

From 8 a.m. to 4p.m. plenty of veterinary services are available, including:

- orthopaedics and surgical services, diagnosis and treatment of locomotory system, respiratory system, skin and hooves, ophthalmological and gastrointestinal tract disorders, pre-purchase veterinary exam
- gynaecological and obstetric services, andrological and biotechnology services in the field of animal reproduction
- full range of internal diseases diagnostics and treatment, including examination of respiratory system, endoscopy of the respiratory system, cardiovascular system examination (ECG) and exercise tests on a treadmill
- a diagnostic laboratory is also located in the Horse Clinic and provides haematological and biochemical parameters analysis in blood
- imaging diagnostics, such as MRI, CT, X-ray, Ultrasound

The clinic operates on two-shift basis.

From 8 a.m to 4 p.m. there are two veterinarians on the shift. From 4 p.m. to 8 p.m. there is one veterinarian on the shift.

Night shifts are carried out in on-call system from 8 p.m. to 8 a.m next day by:

- general veterinarian
- anaesthesiologist
- surgeon

Monday to Friday from 8 a.m. to 4 p.m. the consultations are provided by specialists in animal reproduction, equine surgery, equine diseases and imaging diagnostics.

Students participate in regular work at the clinic during classes and clinical internships in Equine Diseases and Farm Animal Diseases. In addition, students attend classes and clinical internships in the field of internal diseases, surgery and animal reproduction of farm animals on the Agricultural Experimental Farm (RZD) Wilanów-Obory.

5.1.5. Description of how the cadavers and material of animal origin for training in anatomy and pathology are obtained, stored and destroyed

	Acquisition	Storage	Disposal
Anatomy	The cadavers of euthanized cats and dogs are obtained from the Faculty Clinic of Small Animals or other Warsaw veterinary clinics, following the consent of pet owners for the use of animal carcasses for didactic and scientific purposes. Large animals are purchased on the free market with the Department's own funds or donated by the owners.	Initially, the material is preserved in 10% formaldehyde solution. After that, the cadavers and isolated organs are placed in hypertonic NaCl solution. Large specimens are stored in a special room in sealed tanks, whereas the isolated organs in sealed containers in a cooling chamber. Osteology classes are conducted with the help of an abundant collection of isolated bones and complete skeletons which are stored in the Osteological Museum, being a part of the Department of Morphological Sciences.	All corpses and biological waste are securely collected and stored in cooling chamber and picked up as needed for rendering. The disposal occurs according to the national law regulations.
Pathology	The sources of cadavers for necropsy training for students are: cadavers obtained from the commercial activity of the Faculty of Veterinary Medicine (pathology service for private persons and institutions, as well as orders of Policy, Public prosecutor office), • cadavers obtained from the University and private veterinary clinics, poultry farms, avian sanctuary (animals which died or were euthanized due to various disease), • cadaver obtained from private givers (cadavers given for the training for student), hatching eggs obtained from private hatcheries • cadavers of animals which died in other units of WULS-SGGW (piglets from Dawidy farm, poultry from Obory farm)	Cadavers are stored in cold store (special room where cadavers are stored before necropsy is made) or frozen and stored in freezer (if cadaver will be necropsied later).	When the necropsy is finished the remnants of the cadaver are put to special boxes then stored in separated cold store and finally, taken by authorized company.

5.1.6. Description of the group size for the different types of clinical training (both intramurally and extramurally)

The classes in clinical modules are carried out in groups of 15-18 students. Clinical internships are carried out in groups of maximum 8 students.

5.1.7. Description of the hands-on involvement of students in clinical procedures in the different species, i.e. clinical examination, diagnostic tests, blood sampling, treatment, nursing and critical care, anaesthesia, routine surgery, euthanasia, necropsy, report writing, client communication, biosecurity procedures, .. (both intramurally and extramurally)

Students perform regular clinical activities under the supervision of a teacher, including clinical examination, treatment and prevention of diseases, laboratory tests and imaging diagnostics in various animal species. Students interpret tests' results and take part in making diagnosis. They take part in the preparation for the surgery (preparation of the animal, surgical tools, surgical team and operative field); help in anaesthesia, assist during surgery and perform activities associated with postoperative care. Students are involved in client communication (gathering interview, discussing the results and treatment options).

5.1.8. Description of the procedures used to allow the students to spend extended periods in discussion, thinking and reading to deepen their understanding of the case and its management

During the clinical education students work on cases and prepare the presentations of observed cases, discussing diagnostic strategy, differential diagnosis, pathogenesis, prophylaxis and treatment. Each student has assigned patients with various disorders (clinical cases) which allow performing detailed analysis of the medical record, clinical examination, additional tests and comparison to literature data. Students are presenting patients during everyday medical round and suggest possible treatment. During the clinical rotations student groups (mainly of four people) are obliged to write a rotation report about one clinical problem using the literature data which allow to spend extended time on thinking, reading and provides a look into scientific working methods.

5.1.9. Description of the patient record system and how it is used to efficiently support teaching, research, and service programmes of the Establishment.

All data concerning diagnostic procedures and treatment are available in patient record system – "Klinika XP". Students have access to medical records to follow the patients history. They learn how to work with the system and how to put data into it. That way they can familiarize with record keeping.

5.1.10. Description of the procedures developed to ensure the welfare of animals used for educational and research activities

If it is not lowering the educational value, simulators are used during classes. All procedures on live animals are performed in a way to minimize stress and maintain welfare, along with ethical guidance. Surgeries and other procedures are performed only if indicated in particular clinical case.

5.1.11. Description of how (procedures) and by whom (description of the committee structure) the number and variety of animals and material of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The Heads of the Departments are responsible for the selection of animals and material of animal origin used in education. The Heads of Divisions are obligated to provide sufficient resources in order to maintain continuity of classes and in case of shortage implement necessary actions. All used procedures are performed in accordance with the law.

Table 5.1.1. Cadavers and material of animal origin used in practical anatomical training

Species	2017/18	2016/17	2015/16	Mean
Cattle	124	124	124	124
Small ruminants	8	8	8	8
Pigs	0	0	0	0
Companion animals	28	28	28	28
Equine	122	122	122	122
Poultry & rabbits	684	626	568	626
Exotic pets	45	40	23	36
Others (pigeons, chicken embryos, owls)	2,949	2,577	3,296	2,941
Others (bees)	280	280	280	280

* The last full academic year prior the Visitation

Table 5.1.2. Healthy live animals used for pre-clinical training

Species	2017/18	2016/17	2015/16	Mean
Cattle	56	56	56	56
Small ruminants	0	0	0	0
Pigs	0	0	0	0
Companion animals	28	28	28	28
Equine	7	7	7	7
Poultry & rabbits	50	49	84	61
Exotic pets	56	56	50	54
Others (pigeons)	240	201	119	187
Others (bee colonies)	10	6	10	9

Table 5.1.3. Number of patients seen intramurally**

Species	2017/18	2016/17	2015/16	Mean
Cattle*	433	237	341	337
Small ruminants	2	2	1	2
Pigs	55	126	0	60
Companion animals*	12,232	10,724	8,678	10,545
Equine*	80	86	127	98
Poultry & rabbits*	46	1,001	1,065	704
Exotic pets*	332	329	271	311
Others (pigeons)	160	160	114	145
Others (bee colonies)	30	30	27	29

* These data correspond to the following sum: 1st opinion consultations + Referral consultations + Emergency consultations + Surgeries + Computerized tomography + X-ray + Ultrasound scans. Follow-up consultations complementary diagnostic exams were excluded from the calculation. The patient record system do

** Each patient has to be officially recorded in the electronic patient record system of the Establishment and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient, even if it has been examined/treated by several departments/units/clinics.

Table 5.1.4. Number of patients seen extramurally**

Species	2017/18	2016/17	2015/16	Mean
Cattle	6,991	2,522	2,719	4,077
Small ruminants	0	0	0	0
Pigs	2,400	2,711	1,876	2,329
Companion animals	440	315	308	354
Equine	553	56	33	214
Poultry & rabbits	1,270	1,270	1,270	1,270

Exotic pets	0	0	0	0
Others (egg candling)	4,500	4,500	4,500	4,500

** Each patient has to be officially recorded and has to be individually examined/treated by at least 1 student under the supervision of at least 1 member of staff. Each live animal affected by one specific clinical episode is counted as 1 single patient.

Table 5.1.5. Percentage (%) of first opinion patients used for clinical training

Species	2017/18	2016/17	2015/16	Mean
Cattle	77	89	89	85
Small ruminants	100	100	100	100
Pigs	71	100	100	90
Companion animals	25	27	27	26
Equine	63	81	84	76
Poultry & rabbits	14	9	8	10
Exotic pets	25	26	18	23
Others (pigeons)	100	100	100	100
Others (bee colonies)	100	100	100	100
Others (egg candling)	n.a.	n.a.	n.a.	n.a.

Table 5.1.6. Cadavers used in necropsy*

Species	2017/18	2016/17	2015/16	Mean
Cattle	0	0	3	1
Small ruminants	120	224	118	154
Pigs	40	115	57	71
Companion animals	97	155	183	145
Equine	3	9	10	7
Poultry & rabbits	668	610	552	610
Exotic pets	3	3	3	3
Others (pigeons, chicken embryos, owls)	2,949	2,577	3,296	2,941
Others (bees)	530	530	530	530

*These numbers represents only necropsies performed intramural in the necropsy room. It is not showing the large amount of necropsies done by students extramural that cannot be put in this table. They are included in First Day Skills Diary. For details see comments in 5.2

Table 5.1.7. Number of visits in herds/flocks/units for training in Animal Production and Herd Health Management

Species	2017/18	2016/17	2015/16	Mean
Cattle	98	112	112	107
Small ruminants	0	0	0	0
Pigs	2	44	44	30
Poultry	2	2	2	2
Rabbits	10	10	10	10
Others (snakesw, falcons, chinchillas)	5	5	3	4
Others (apiary)	3	3	3	3
Others (minks)	1	1	1	1

Table 5.1.8. Number of visits in slaughterhouses and related premises for training in FSQ

Species	2017/18	2016/17	2015/16	Mean
Ruminant's slaughterhouses	1	1	1	1
Pig's slaughterhouses	10	38	38	29
Poultry slaughterhouses	1	1	1	1
Related premises **	1	0	0	0
Others (specify)	0	0	0	0

** Premises for the production, processing, distribution or consumption of food of animal origin

5.2. Comments

- Low number of cattle, pigs, sheep and goats necropsies is due to the European and National Regulations (e.g. 999/2001, 73/2009, 1069/2009). The Faculty cannot receive the corpses of dead farm animals. Only animals that came alive and died in the Faculty can be sent to Establishments necropsy room.
- In FSDS each student is obliged to perform at least 2 necropsies in two different species (companion animals, cattle, horses etc.) during EPT. These is a method of compensation of lacks in the number of intramural necropsies.

5.3. Suggestions for Improvement

- Increase the number of necropsies that will be executed by:
 - Currently, the Establishment is trying to become a repository point for animal carcass to enable the obtainment of significant number of carass, particularly in case of cattle.
 - The Syllabus is supplemented by a statement that only students who present the protocols of autopsies conducted on four different animal species at the Faculty or under supervision of an approved veterinarians will be allowed to sit the exam of pathology.
 - The number of requested post-mortem analysis in the FSDS will be increased to minimum four, each of them on other animal species.

6. Learning Resources

6.1 Factual Information

6.1.1. Description of the main library of the Establishment:

The Library of Warsaw University of Life Sciences was established in 1911. At first, its collections were stored in several locations and only after moving them to the building in Rakowiecka Street in 1933 the Library staff were able to begin their systematic integration and development, as well as hire more qualified employees. In August 1939 the Library collections consisted of 42,000 items. However, the constantly growing collections and deteriorating facilities eventually impaired the regular Library services. Thus, in 1996 the University authorities decided to begin the construction of a new Library building. The project divided into three stages was finished on July 7, 2007 with the opening ceremony when the Library was named after Władysław Grabski. The new Library building offers appropriate conditions for the University library and information network consisting of the Main Library and the faculty libraries gathering collections in the fields and specializations offered at the University.

-) opening hours and days

The information on the library opening hours is provided at the library entrances, on the Library websites and in the library leaflets.¹

-) annual budget

Annual budget of the Main Library is about 1,400,000 €.

-) facilities: location in the campus, global space, number of rooms, number of seats, number of other (e)books and (e)periodicals

The Wladyslaw Grabski Main Library building is located on the New Campus by Nowoursyn-owska 161 Street in Warsaw. It offers appropriate conditions for the University library and information network consisting of the Main Library and the faculty libraries gathering collections in the fields and specializations offered at the University. The Library users are offered approximately 550,000 volumes of books, journals and special collections in the paper form and around 300,000 electronic items retrievable with a set of advanced search tools. All types of collections can be accessed in six reading rooms provided with Wi-Fi access and the materials available for loan may be borrowed from two loan desks. The library catalogue is fully automated and gives complex information on the Library collections. The reading rooms of all University libraries are publicly available. The Main Library participates in the scholarly communication through the process of documenting the University staff achievements and offering access to a variety of online full-text, abstract, community and bibliographic information databases available on-site, as well as from the non-University network workstations. The Library Reading Room can be used without setting up a Library account. The Library account is required for borrowing books and using an external logged-in access to the databases subscribed by the Library which one can find on the Main Library website².

-) equipment: number of computers, number of electrical connections for portable PC available software's for bibliographical search

see 6.1.2.

-) number of veterinary books and periodicals

¹ <http://www.bg.sggw.pl/index.php/en/home-en-gb/about-the-library/opening-hours>

² <http://bg.sggw.pl/index.php/en/>

see 6.1.2.

-) number of veterinary e-books and e-periodicals

see 6.1.2.

6.1.2. Description of the subsidiary libraries

The Veterinary Library is a part of the Main Library but operated by the Faculty and located in the Faculty Building No 24. It uses the electronic library system of the University. The majority of the collections are arranged in open stacks. The books are ordered by subject divided into the areas reflecting the profile and features of the veterinary medicine studies. The journals are arranged alphabetically by title. The collections from the storage rooms can be requested from the librarian on duty.³ The Library has a total of 4 FTE in personnel, 194 m², 5 rooms, 56 seats for students and 5 computers. The software for bibliographical search by program Aleph (Primo) is available, too. The collection consists currently of about 12,000 volumes (books, e-books, journals and e-periodicals). The interlibrary loans from Polish libraries are done by the Reading Room of the Main Library for all faculties that do not have their own faculty libraries. If a faculty has its own library, this library is responsible for doing interlibrary loans for the faculty community. Foreign interlibrary loans are done by the Main Library only.

6.1.3. Description of the IT facilities and of the e-learning platform (dedicated staff, hardware, software, available support for the development by staff and the use by students of instructional materials)

WULS-SGGW engages substantive team (39 FTE) responsible for IT support. The team consists of IT Centre (CI) and Centre for Multimedia Education (CEM). The requests for support can be submitted by both University employees and students, by all available communication routes. All details and the range of competences of CI and CEM are presented on the official WULS-SGGW webpage^{4,5}.

The Faculty e-learning platform is based on University platform which utilizes moodle 3.5 version. The platform is located at e.sggw.pl and might be used in Polish and English. At the Faculty, the courses are assigned to particular semesters. Consequently, a student can easily find a course of interest when logged-in. E-learning classes are conducted by individual teachers or teams responsible for selected course. The whole e-learning process is supervised by an authorized Faculty administrator who also distributes further authorization to the employees. In total, at the FVM there is the coordinator and 34 other ET involved in various e-learning activities. The materials and classes are available in internet. The meeting with the teacher is organised only to discuss the tasks given to the students. The courses include both lectures and practical classes, supplementary materials are available on the platform. To monitor the progress of learning an interactive presentation in SCORM system is employed. The system requires active involvement of students, submission of solved tasks, tests. The tests and final exam are performed on-line. Teaching materials are available for students in the form of PowerPoint presentation, PDF files, Articulate, Adobe Presenter or Xerte. E-learning courses are organised for undergraduate Polish and International students of FVM and other faculties and postgraduate students, including participants of specialization studies. A supplementary activity which supports e-learning courses is on-line lecture which can be made available on connect.sggw.pl. At the University, there is a room adopted to on-line meetings and consultations.

³ <http://www.bg.sggw.pl/index.php/en/home-en-gb/about-the-library/faculty-libraries/veterinary>

⁴ <http://www.sggw.pl/dla-studentow/informacje-organizacyjne/it-dla-studentow/pomoc-informatyczna>.

⁵ <https://cem.sggw.pl/>

6.1.4. Description of the available electronic information and e-learning courses, and their role in supporting student learning and teaching in the core curriculum

Blended learning formats have become increasingly important in conveying content to students in a flexible and repeatable way. Consequently, WULS-SGGW strongly supports the development and implementation of such formats through technical support and funding.

6.1.5. Description of the accessibility for staff and students to electronic learning resources both on and off campus

The Library users (students, postgraduate students, employees of WULS-SGGW) may access databases subscribed by the Library from any computer, including those outside the campus network. However, the databases can be accessed from non-campus network computers by the users with valid Library patron accounts only. WULS-SGGW provides students of the University with access to a wireless network (Wi-Fi) in the form of the EDUROAM (Education Roaming) services which can be used in all University buildings in which it is launched.

Students also can use public computer workstations which are available in the Main Library.

6.1.6. Description of how the procedures for access to and use of learning resources are taught to students

The Main Library organizes training for students and employees whenever requested and always for incoming first year students. New students, who are going to have an access and use the learning resources have to “First log-in in the system” option in the tab “My Account” on Main Library website.⁶ All instructions are provided on the website of the Main Library. Also, there is a help desk and telephone helpline if one has questions related to the use of the Library account. The Library account may also be activated by the library staff on duty in the appropriate Library. On the website one can also watch an instructional movie. The Library Reading Room can be used without setting up a Library account. The Library account is required for borrowing books and using an external logged-in access to the databases subscribed by the Library.

6.1.7. Description of how (procedures) and by who (description of the committee structure) the learning resources (books, periodicals, databases, e-learning, new technologies, ..) provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The library runs a survey each year to determine the literature needs of each institution, as well as the staff and students. In addition, requests to purchase new monographs can be submitted online. Subject representatives decide on the relevant titles / monographs to be used for their teaching. The Head librarian is responsible for the development and maintenance of literature holdings. He works closely with the Dean's Office and the Faculty institutions. The Head of the library sends the information on new positions, asks which positions are necessary and reports the requests to the Dean's Office and Faculty Council. Changes in central IT infrastructure and services are communicated by the University to the Faculty and all users either electronically or by mail.

6.2. Comments

The IT infrastructure available at the Faculty is developed, technically advanced and well supported by IT Centre.

⁶ <http://www.bg.sggw.pl/index.php/en/home-en-gb/how-to-use/how-to-join>

- The Faculty has its own library, which is an important support for students.
- The Faculty Library and the Mail Library are well equipped, including Wi-Fi access.
- Upon student's request, the library lends educational materials from other libraries, both domestic and foreign.
- The Main Library has its own digital resources.

6.3. Suggestions for Improvement

- Further extantion of the collection with paper books and new sources of digitalised didactic materials
- Extension of the access to digital databases of scientific publications
- Extension of the opening hours of the Faculty library (weekends)
- Installation of small rooms to enable group work for up to 6 students

7. Student Admission, Progression and Welfare

7.1. Factual Information

7.1.1. Description of how the educational programme proposed by the Establishment is advertised to prospective students

Information about the veterinary education at WULS-SGGW and at the Faculty is provided in Polish and English at the official Faculty webpage⁷. The Faculty website presents information on the profession, short profiles provided by Faculty members, a structure of the Faculty, organization of the academic year, five and half-year Degree Programme⁸, guidance for applications, admissions and course of study recruitment procedure for Polish⁹ and English candidates^{10,11}, Inaugural Graduate Talk. The orientation day is organized separately for Polish and English students. The webpage also provides information about the curriculum, day-to-day student life, perspectives, job summaries and application methods, as well as a large number of interviews with teachers and students, Research Circle of Veterinary Students, IVSA Warsaw, the student council¹², public events such as days of science¹³, Festival of sciences on WULS-SGGW¹⁴, election of students' representatives to the Council of the Faculty of Veterinary Medicine¹ and more.

7.1.2. Description of the admission procedures for standard students:

Selection criteria

a. Polish candidates

The admission for Polish candidates is centrally regulated by WULS-SGGW administration⁷. The prerequisites to enter veterinary education is described in decree of MSHE dated from 27 September 2018¹⁵. The system of the recruitment of new students relies on their classification through by the student's affairs office (SAO) of WULS SGGW. The evaluation is based on the results of the high school grades presented on the school-leaving certificate. Within the evaluation process the grades are converted on WULS-SGGW points according to the scale published in regulations of the recruitment⁷. The Establishment decides which objects are taken into account for the count of points from the high school grades and the school-leaving certificate (biology and chemistry). Moreover, the Establishment sets the limits of points the required for the acceptance as a standard and full fee student (143 points for standard and 118 for full fee students in period 2016/2017). During the admission process for 2016/2017, there were 938 candidates, 205 out of them were accepted (150 the standard and 55 full fee students). At this time there were 210 available places.

b. English candidates

The recruitment for the Veterinary Medicine International Studies is conducted by the International Medicine Studies (IMS) cooperating company. The requirements are:

1. Original of the secondary school leaving certificate – document entitling the candidate to undertake studies in the country of its issue (accompanied by authentication/legalization);

⁷ <http://wmw.sggw.pl/>

⁸ <http://wmw.sggw.pl/en/2010/01/28/degree-programme/#more-2160>

⁹ <http://sok.sggw.pl/>

¹⁰ http://wmw.sggw.pl/en/category/study-offering/recruitment_process

¹¹ http://www.ims-medstudy.com/Veterinary_School_Download_Application_Registration_Material_Warsaw

¹² <http://wmw.sggw.pl/2018/10/02/samorzad-studencki-wmw/>

¹³ <http://www.sggw.pl/aktualnosci/dni-sggw-2018>

¹⁴ <http://www.sggw.pl/aktualnosci/xxii-festiwal-nauki-w-sggw>

¹⁵ <http://prawo.sejm.gov.pl/isap.nsf/DocDetails.xsp?id=WDU20180001861>

2. Positive result of biology and chemistry exam (40 questions, single choice test), passing level: minimum 16 points.
3. Medical report revealing no medical contradictions to undertake veterinary studies.
4. Submission of all required documents by defined deadline.

The entrance exams are designed by the FVM WULS-SGGW but conducted by the IMS. The exam sheets are sent to the FVM for evaluation. FVM issues certificates of passing the exam which are sent to the IMS agent (document used by candidates mostly for visa purposes). Graduates/Bachelor's degree holders from biology/animal science/medicine related studies may be exempt from the entrance exam by the decision for the Vice-Dean for Foreign Studies. Admissions rate: 65 students for app. 100 candidates taking the entrance exam.

Policy for disable and ill students

All accepted students are obliged to deliver a medical statement revealing no contradiction to undertake veterinary studies. The issuing physician decides if the candidate is able to undertake the studies.

The disabled and ill applicants can apply for a reduction in the waiting period and / or grade requirements. In the case of disabilities, the first choice of WULS-SGGW is respected. Once admitted, the students with disabilities or chronic illnesses can contact the Dean's Office, Vice-Dean for Students' Affairs (DSA) or SAO at WULS-SGGW. All of those offices support students in providing means to reduce disadvantages so that the students can participate in courses, exams and internships. In addition, measures to ensure barrier-free accessibility to all facilities are implemented by the WULS-SGGW. Special Services for Students with Disabilities offered by the WULS-SGGW¹⁶ include counselling for Students with Disabilities offered by the Students Council and self-help group.

Composition and training of the selection committee

The Faculty Selection Committee is appointed on the basis of the resolutions of Faculty Councils for the period of one year, The committee members are selected upon the recommendation from the Vice-Dean for Students' Affairs. The commission consists of 3 members who need to pass the preliminary training on the Faculty and then at the SAO. The competences of the Commission are limited to qualify the candidates for students on the basis WULS-SGGW points. The competences of the commission are determined by the Rector's ordinance (no 68/201/2018¹⁷).

Appeal process

The students not admitted to the degree program receive a rejection letter from the Faculty Selection Committee. It is possible to appeal against this notification to the Central Selection Committee of WULS-SGGW within 14 days.

Advertisement of the criteria and transparency of the procedures

The procedures and requirements are available to view in both Polish and English on the website of WULS-SGGW^{5,7,15}. The SAO can be contacted if questions pertaining to applications or admissions arise.

7.1.3. Description of the admission procedures for full fee students

¹⁶ <http://niepelnosprawni.sggw.pl/>

¹⁷ <http://www.sggw.pl/dla-kandydatow/rekrutacja>

The requirements regarding the quantity of WULS-SGGW points from the high school grade lowered in relation to standard students about 18-24% (110-118 points)

7.1.4. Description of how the Establishment adapts the number of admitted students to the available educational resources and the biosecurity and welfare requirements

Limit to the number of students admitted each year

Currently, the number of students admitted each year is limited to approx. 260 (varying from 250-275 see table 7.1.1). This number is annually recalculated by the WULS-SGGW administration. Teaching hours in the curriculum, student-teacher ratio in the various courses and number of core funded academic staff influence the number of students to be admitted each year. The number of animal patients and/or didactic animals, structural resources (such as teaching facilities) as well as biosecurity and welfare requirements are not taken into account; these have to be adjusted by the Establishment to the number of accepted students. .

Number of government-funded student places

All standard student places are government-funded.

7.1.5. Description of:

-) the progression criteria and procedures for all students;

Detailed rules and requirements concerning holdings of occupations, detailed forms of the credit of all required examinations with terms given for one month before the commencement of occupations are provided on the Faculty website. . The timetable arrangement is elaborated with the involvement of the Student Council. Successful participation in all practical courses (exercises, seminars, electives, demonstrations, rotations etc.) is documented in the eHMS. Students can check their status in the eHMS. Detailed rules of studies were recorded in SR¹⁸.

-) the remediation and support for students who do not perform adequately

The general academic advising is carried out by the SAO. Specific advising regarding the veterinary curriculum is available in Dean's Office and the chairs of the examination boards. The examination progress is monitored by Dean's Office (DO) and the Vice-Dean for Student Affairs (DSA). DO and DSA. Students not sufficiently progressing are invited by DSA to a counselling led by the chair of the respective examining board. The Vice-Dean for Student Affairs offers consultation meetings three times weekly. The meetings with students who do not perform adequately are aimed at working on solutions of problems. Each meeting are confirmed DSA meetings book.

-) the rate and main causes of attrition

The Faculty annually compiles key figures on academic progress in a quality report which is discussed with SAO and Rectors' didactic commission. The following table is derived from the 2018 quality report and presents the study cohort progression from the 1st to the 3rd semester for the last three years. The number of students remaining is constant at over 70%.

¹⁸ <http://www.sggw.pl/dla-studentow/informacje-formalno-prawne/regulamin-studiow>

Cohort Development (number of those beginning a course of study in a cohort in proportion to those still studying in the 3rd subject-specific semester)

Degree program	Students of 1st year				Students of 3rd year			Cohort remaining		
	14/15	15/16	16/17	17/18	15/16	16/17	17/18	Cohort 14	Cohort 15	Cohort 16
Veterinary Medicine	198	191	190	192	152	144	144	77%	76%	75%

Exmatriculation surveys regularly conducted by the University revealed that 89% of former veterinary students continued to study after leaving WULS-SGGW. This indicates that a large proportion of exmatriculations is due to the transfers to other Universities, mostly to medicine and stomatology faculties.

-) the exclusion and appeal procedures

Students who do not pass the second examination retake (third attempt) in an individual subject receive a written notice of final examination failure from the chair of the examining board. Deleted students may apply for the reversal of the decision to the Rector responsible for student's. In case of upholding a decision the student can resume studies in the following year academic. In case of the refusal student can appeal to the proper court.

-) the advertisement to students and transparency of these criteria/procedures

The examination process including criteria for expulsion are laid out in the Study Regulation and by eHMS repeatedly communicated to students.

7.1.6. Description of the services available for students (i.e. registration, teaching administration, mentoring and tutoring, careers advice, listening and counselling, assistance in case of illness, impairment and disability, clubs and organisations, ..).

A broad range of services related to registration (SAO), teaching administration (DO), mentoring and tutoring, careers advice, listening and counselling, assistance in case of illness, impairment and disability are available both at the WULS-SGGW and the Faculty. The WULS-SGGW also offers assistance in the form of counselling, short-term loans and subsidies.

The subsidies are granted primarily during exam periods, in cases of illness and to single parents while taking their final exams. Additionally, general social counselling (for example concerning housing subsidies, study financing, health insurance, etc.) and counselling for students with children is offered¹⁹. For questions, suggestions and complaints concerning study matters as well as personal problems, e.g. in cases of overwork or conflict with teachers, students can address their concerns to the DO and DSA. Proposal of clubs and organisations is presented on the both side of WULS-SGGW and Faculty.

7.1.7. Prospected number of new students admitted by the Establishment for the next 3 academic years

Enrolment numbers in the coming years are expected to remain 250- 275 students.

7.1.8. Description of how and by whom the admission procedures, the admission criteria, the number of admitted students and the services to students are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

¹⁹ <http://wns.sggw.pl/wp-content/uploads/2014/SGGW-jako-uczelnia-zorientowana-przestrzenie-na-potrzeby-studentów-z-dziećmi.pdf>

See also Chapter 7.1.2.

Intended or expected changes in the number of incoming students, changes in the number of students progressing through the study phases, reasons for attrition, etc. are identified through regular meetings with WULS-SGGW management – Rectors Didactic Commission in the context of the quality of teaching (FTQAIS and QT), by surveys and feedback from the DO and SAO, the chairs or the examination boards of the veterinary profession. They are discussed in the Deans' Office, on Rectors Didactic Commission meetings and with responsible individuals. All decisions taken by the respective body are communicated back through the Faculty Council, direct communication with stakeholders and the Faculty website.

Table 7.1.1. Number of new veterinary students admitted by the Establishment

Type of students	2017/18	2016/17	2015/16	Mean
Standard students	150	147	140	148
Full fee students	55	58	53	55
IMS Students	64	67	58	63
Total	269	272	251	264

* The last full academic year prior to the visitation

Table 7.1.2. Number of veterinary undergraduate students registered at the Establishment

Year of programme	2017/18	2016/17	2015/16	Mean
First year	256	254	249	253
Second year	205	207	211	208
Third year	191	180	192	188
Fourth year	181	195	190	189
Fifth year	191	187	185	188
Sixth year	181	168	189	179
Total	1,205	1,191	1,216	1,205

* The last full academic year prior to the visitation

Table 7.1.3. Number of veterinary students graduating annually

Type of students	2015/16	2014/15	2013/14	Mean
Standard students	138	153	153	148
Full fee students	0	0	0	n/a
English division	41	29	35	35
Total	179	182	188	183

Table 7.1.4. Average duration of veterinary studies

The average duration of study for graduating students in 2017/18 was 11.7 semesters.

Duration	% of the students who graduated on AY* (2015/16)
+ 0**	82,61
+ 1 year	13,77
+ 2 years	2,17
+ 3 years or more	1,45

** This is equivalent to the minimum time required (11 semesters or 5.5 years)

Table 7.1.5. Number of postgraduate students registered at the Establishment

Programmes	2017/18	2016/17	2015/16	Mean
Polish Veterinary Specialization Trainees -together	213	249	256	239
a. dogs and cats diseases	77	81	79	79
b. non domestic animals diseases	34	34	42	37
c. epidemiology and veterinary administration	38	38	35	37
d. hygiene of slaughter animals and food of animal origin	48	48	46	47
e. poultry diseases	0	34	31	22

f. veterinary laboratory diagnostics	16	14	23	18
PhD students	92	69	60	74

7.2. Comments

- The Faculty is subjected to a regulated but transparent central selection procedure for applicants.
- The number of admitted students is externally determined and depends on the curriculum (required hours and structure) and the teaching capacity of the core funded academic staff. There is no flexibility for the Faculty, and recruiting additional teaching staff would result if more students are centrally admitted.
- There is a broad range of information and support activities available both at the WULS-SGGW and the Faculty.
- The progression of students (mainly cohort success, time to degree and reasons for attrition) is closely monitored in the WULS-SGGW with QT processes control and annually discussed with University management
- Comprehensive student-level monitoring of study progress is recorded by DO in eHMS and by SAO on WULS-SGGW.
- Decisions about pregnant students attending courses that might pose a risk to the unborn child are currently taken by the respective institutions, resulting in inconsistencies.
- Child-care facilities for small children near the campuses are subject of limited availability.

7.3. Suggestions for Improvement

- Options for limiting capacity and thus reducing the number of students to be admitted while retaining teaching staff numbers are evaluated to ensure an optimal student-teacher ratio.
- An initiative is taken to electronically exchange study and examination data at student level between OSA and the DO to improve student monitoring.

8. Student assessment

8.1. Factual Information

8.1.1. Description of the global student's assessment strategy of the Establishment

The process of veterinary student's assessment is regulated by the WULS-SGGW management (Rectors Didactic Commission) and FTQAIS. The assessment in the context of the quality of teaching is coordinated and supervised by the SAO and implemented by the Faculty. The aim of the evaluation is to determine whether students acquire the knowledge and skills required for further studies and for practicing as a professional veterinarian. The veterinary examination process is divided into two parts, the preclinical part (first 4 semesters) and the clinical part (which starts in the 5th semester and ends with the final exam in the 11th semester). The prerequisite for advancing to the clinical study phase is the successful completion of all parts of the preclinical education. The prerequisites for participation in the final examinations in the 11th semester are passing all the preceding examinations, completion of all required courses, as well as all extramural practical training.

The format of the subject-specific examinations is decided by the Deans' coordinator for intra and extramurally practice teaching (DCIEPT) and specified in the examination regulation. The broad content is provided by the FTQAIS; details are specified in the subject-specific learning objective and examination topic catalogue. The latter are provided by the DCIEPT. The Exams are offered and supervised by members of the preclinical or clinical examination boards. These have to be sufficiently qualified for the subject (lecturers with minimum a doctorate or equivalent degree), are proposed by the Faculty Council and confirmed by the SAO.

In addition to the official examinations, a view number of in-term assessments of learning performance are in place, including clinical discussions and homework assignments to assist in recording successful completion of relevant courses (e.g. seminars, exercises, clinical demonstrations and rotations).

Pregnancy

According to the University regulations, if a female student informs about the pregnancy an individual study and examination plan is determined together with the chair of the examination board. In most cases pregnant students obtain the medical leave for a period of the pregnancy²⁰.

8.1.2. Description of the specific methodologies for assessing:

In accordance with the SR and the FTQAIS, the exams may be written (essay or multiple choice), oral, practical or in a combination of these formats. The supplementary examination regulation (syllabi) defines the form of the examination, the examination components and the time in the course of study. The exams typically take place in session, i.e. during the time when no courses run. Examinations groups for oral and practical tests consist generally of 4 (minimum 2) students. The exams are organised and conducted by the Faculty. The results are reported to the OSA by DO. The first exam retake takes places usually not earlier than three weeks after the first failed examination. In accordance with the SR, either DSA or DFS can permit the second retake (third exam). If the the second retake is failed the exam might be taken one year later.

-) theoretical knowledge

²⁰ <http://www.sggw.pl/dla-kandydatow/rekrutacja>

Theoretical knowledge is identified primarily in oral or written examinations. The examination subjects in which both theoretical knowledge and practical skills are examined can be split into several examination components.

-) pre-clinical practical skills and clinical practical skills

Practical skills are primarily assessed in combined oral-practical formats. The preparation of an experiment or a compilation of a case report is often a mandatory element of the examination.

8.1.3. Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence, as prescribed in the ESEVT Day One Competences

The use of different examination formats, partially a mixed theoretical and practical exam, allows for the examination of learning objectives corresponding to the level of training and for the assessment of theoretical and clinical skills and Day One competences. This is to ensure that the substantive specifications of the FTQAIS and of Article 38 in Guidelines 2005/36/EG concerning educational objectives, as well as the EAEVE Day One competences, have been achieved.

8.1.4. Description of the processes for:

-) ensuring the advertising and transparency of the assessment criteria/procedures;

The Faculty website contains all the relevant legislation, information on examination periods and leaflets on conducting the veterinary examination and final exams. Detailed information on the structure, content and evaluation criteria for examinations are listed in syllabi on the Faculty website.

-) awarding grades, including explicit requirements for barrier assessments;

For each examination topic, student receive a mark between 5 (very good) and 2 (fail). Each official exam has to be passed (mark 3 or better). These marks and the grade points' average for each examination section are detailed in syllabi on the Faculty website.

-) providing to students a feedback post-assessment and a guidance for requested improvement;

The examination results of an oral, practical or combined examination are logged by the examiner(s), reported to the student immediately after the completion of the examination and justified in a short feedback report. Written examinations are evaluated within three weeks and the results are communicated to the students in adherence to data protection guidelines. All results are transferred to the eHMS and to the SAO.

-) appealing

See 7.1.5

8.1.5. Description of how and by whom student's assessment strategy is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

See figures in 11.1.

8.2. Comments

- The Faculty is subjected to a regulated but transparent central selection procedure for applicants.
- The number of admitted students is externally determined and depends on the curriculum (required hours and structure) and the teaching capacity of the core funded academic staff. There is no flexibility for the Faculty and recruiting additional teaching staff would result if more student are centrally admitted.
- The progression of students (mainly cohort success, time to degree and reasons for attrition) is closely monitored in the WULS-SGGW quality teaching processes and annually discussed with the

University management (in accordance with Faculty and WULS-SGGW teaching quality assurance and improvement system).

- There is a broad range of information and support activities available both at the WULS-SGGW and the Faculty,
- Comprehensive student-level monitoring of study progress is registered by DO, SAO, DFS and DSA.
- The decisions concerning pregnant students are taken by DFS or DSA, mostly resulting in sending them on the sick leave for the protection of the unborn child (on students application).
- Child-care facilities for small children near the campuses are subject fo limited availability.

8.3. Suggestions for Improvement

- Options for limiting capacity and thus, reducing the number of students to be admitted while retaining teaching staff numbers are evaluated to ensure an optimal student-teacher ratio.
- An initiative is taken to electronically exchange study and examination data at student level between the SAO and the DO to improve student monitoring.

9. Academic and Support Staff

9.1. Factual Information

9.1.1. Description of the global strategy in order to ensure that all requested competences for the veterinary programme are covered and that staff are properly qualified and prepared for their roles

The appointment procedure of academic teachers follows the Internal Guideline for Appointment described in FTQAIS (Chapter 5.4. k). The first step is formulation of a profile of the candidate which describes the requested competences in sciences, teaching and others on detail. The commission for appointment has the important task to select the most suitable person for the vacancy. The last decision is taken by the foundation board.

The appointment procedure of scientific and support staff is task of the Heads of Departments or Clinics. They formulate the profile and are responsible for advertisement and selection of the candidate bearing in minds requested qualifications of applicants. After announcement of position (internet, newspaper, journals), the Head of Department or Clinic invites and selects the applicants on basis of requested qualifications which are usually proved by their certifications of vocational trainings. After all, the department of HR is responsible for the contract of employment. All needed steps from advertising until employment are described in the guideline selection and recruiting of department human resources, which is communicated per intranet.

Faculty employees are selected through a structured selection processes with the objective to recruit the best candidates, and are highly qualified in their area of responsibility (see appointment procedure in Chapter 9.1.2. and work position placement procedure in Chapter 9.1.3. The Dean's Office, together with the respective institution, monitors the teaching staff development and identifies subject areas in which (additional) expertise is required. If necessary, the strategic plan is adapted accordingly. All staff involved in teaching has to attend mandatory basic and voluntary advanced training and development programmes in educational matters.

9.1.2. Description of the formal programme for the selection, recruitment and training to teach and assess students (including continuing education) of the academic Staff

The appointment procedure of academic teachers is based on Higher Education Law, Statutes of the University and requirements of FTQAIS. The selection and recruiting of scientific staff are a combination of local activities of institutes or clinics and central processing of administration, described in a guideline of department human resources (see 9.1.1.).

It is essential for academic staff to absolve a training in teaching and assessing students. Most candidates hired by the Faculty completed their doctoral degrees during PhD studies, either at WULS-SGGW, or other University. During their PhD studies they had to conduct practical classes with students and attend mandatory course on „Modern methods and techniques of professional teaching“. The Dean's Office monitors the teaching staff development and identifies subject areas in which (additional) expertise is required.

9.1.3. Description of the formal programme for the selection, recruitment and training to perform their specific duties (including continuing education) of the support Staff

Selection and recruiting

The selection and recruiting combines local activities of institutes or clinics and central processing of administration, the same as for scientific staff, described in the guideline of administration unit of human resources (see 9.1.1.)

Training and continuing education

The Heads of Departments and Clinics describe the required qualifications for the announced positions, e.g. biosecurity and QA procedures. The selection of the applicants follows on the basis of these qualifications which are usually proved with their certifications of vocational trainings.

The Heads of Departments and Clinics review the requested skills for different posts. If missing knowledges are expected or recognised, e. g. due to new scientific technologies, the Heads of Departments and Clinics offer special trainings or send the employees to suitable trainings. Furthermore, the staff in laboratories and animal housing is instructed regularly in topics of biosecurity and animal handling. General seminars are offered by the central administration, like seminars about First Aid, waste in laboratories or training in standard computer software.

For new employees a practical training at the workplace conducted by the employer is mandatory.

9.1.4. Description of the formal programme for the appraisal, development, promotion criteria and procedures, supporting and mentoring of both academic and support Staff

The general procedure of appraisal, development, supporting and mentoring of both academic and support staff is carried out on an individual basis in the Departments and Clinics. The Heads of Departments and Clinics together with their staff are specialists in their working field and possess requested skills which range depends on their research fields and teaching duties. The actual and future needs for each individual are defined and course of action is agreed. The academic staff is especially encouraged and supported to absolve professional trainings abroad in various foreign institutions.

9.1.5. Description of the formal rules governing outside work, including consultation and private practice, by staff working at the Establishment

Secondary employment is strictly regulated and must be indicated to and approved by the University administration prior to the beginning. Secondary employment may be refused if there is concern that it may conflict with the regular employment.

All academic teachers who are veterinarians and work at the Faculty Clinics are also self-employed vets and may legally own clinics outside the Faculty or work for private clinics.

9.1.6. Description of the formal programme of the Establishment for the assessment of teachers by students and its outcome

The assessment of teaching quality by students follows the internal regulation of evaluation according to the FTQAIS. At WULS-SGGW two questionnaires are distributed via the internet: one addressed to the students and one addressed to the graduates. Student questionnaire concerns the general teaching environment, subjects and individual teachers. The teachers are informed personally about their individual results. After the Dean's Office gets the individual and overall comments correcting measures are derived from the students' feedback. The results concerning the general teaching are reported to the Faculty Council.

9.1.7. Prospected number of FTE academic and support staff of the veterinary programme for the next 3 academic years

The Faculty does not expect significant changes in the nominal position plan within the next 3 years, i.e. the number of academics staff will remain stable.

9.1.8. Description of how and by whom the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The establishment is committed to recruit highly qualified academic and support staff. The number of staff positions (all levels) assigned to the respective Departments and Clinics is assessed regularly by Heads of the Departments and verified by the Dean's Office. The number of permanent academic staff positions is based on two factors:

- Number of students
- Number of teaching hours

Vacant permanent positions are evaluated and potentially reallocated among Departments. All position announcements are checked by the Faculty and the University administration.

Professor positions

For the vacant professor positions, the Deans office together with the Head of the Department assesses the requirements based on the strategic plan of the Faculty, as well as the availability of viable candidates. The Faculty Council has to approve the position description and requirements before this is forwarded to the University administration for advertisement. The applicants are screened by the Dean's commission and external candidates are invited to an interview and are requested to prepare a lecture. External letters of references are requested. The commission drafts a report with recommendations that has to be approved by the Faculty Council and the University Senate.

Permanent academic staff

For the vacant positions, the Department drafts an announcement specifying the areas of responsibility and requirements of the candidates. This is checked in the Deans Office concerning the strategic plan of the Establishment and has to be approved by the Faculty and University administration. The selection process is handled by the respective Department or Clinic in agreement with University regulations.

Non-permanent academic staff and support staff

For the vacant positions, the Department drafts an announcement specifying the areas of responsibility and requirements of the candidates. This has to be approved by the Faculty and University administration. The selection process is handled by the respective Department or Clinic in agreement with University regulations.

Table 9.1.1. Academic staff of the veterinary programme**

Type of contract		2017/18	2016/17	2015/16	Mean
Permanent (FTE)		133	135	137	135
Temporary:	Interns (FTE)	-	-	-	-
	Residents (FTE)	-	-	-	-
	PhD students (FTE)	92	69	60	74
	Practitioners*** (FTE)	6.9	6.8	5.5	6.4
	Others (fixed-time contract) (FTE)	15.25	16	14.75	15.3
	Others (teachers from other faculties of WULS-SGGW)	19	19	19	19
Total (FTE)		266.15	245.8	236.25	249,4

* The last full academic year prior the Visitation

** All staff included in this table must have received a training to teach and to assess undergraduate students.

Practitioners involved with EPT are not included in this table.

*** For details see appendix 9.1.1

Table 9.1.2. Percentage (%) of veterinarians in academic staff

Type of contract	2017/18	2016/17	2015/16	Mean
Permanent (FTE)	82	82	82	82
Temporary (FTE)	82	82	82	82

Table 9.1.3. Support staff of the veterinary programme

Type of contract	2017/18	2016/17	2015/16	Mean
Permanent (FTE)	34	30	31.5	31.8
Temporary (FTE)	15	12.5	7.5	11.66
Total (FTE)	49	42.5	39	43.5

Table 9.1.4. Research staff of the Establishment

Type of contract	2017/18	2016/17	2015/16	Mean
Permanent (FTE)	8.5	9	8.5	8.66
Temporary (FTE)	3.5	6.5	6	5.33
Total (FTE)	12	15.5	14.5	14

9.2. Comments

- For the comments to the number of staff, see 12.2
- The student/teacher ratio is fixed by the legal capacity regulation and cannot be altered at the University level. However, the creation of small groups for special purposes (clinical rotations, for example) is acceptable.

9.3. Suggestions for Improvement

- Special obligatory courses on didactics, e-learning and e-teaching should be introduced for young or new academic staff at the University level.

10. Research Programmes, Continuing and Postgraduate Education

10.1. Factual Information

10.1.1. Description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based undergraduate veterinary education

One of the principles of WULS-SGGW and the Faculty of Veterinary Medicine is to provide students at all levels with up-to date, research-oriented teaching. Faculty members participate in research activities covering practically all fields of veterinary sciences and extend towards general medicine, biotechnology and biomedical base sciences which are conducted in the Faculty-run state-of-the-art laboratories and in the frame of various interdisciplinary research collaborations with numerous institutions in Poland and abroad. Currently, the Faculty assures the integration of staff research results at several key points of education. For under-graduate studies there is a policy requiring yearly exchange of at least 30% of the lecture materials. For the practical classes the policy of constant update and modification of programme is enforced by the FTQAIS. The same document enforces the introduction of current research results in both lectures and practical classes at the Faculty level. To enhance study curriculum, the Faculty currently offers 75 elective modules at semesters 1-11. From those, 59 start from semester 5, and are oriented towards the enhancement of the practical clinical knowledge and skills of future veterinarians. There are differences in the elective modules offered at Polish and English divisions due to the regional demand specifics and student's requests. For details see 3.1.7. Furthermore, upon student's request and upon consultations with Student Council, the Faculty expands the list of elective modules at offer aiming to provide at least 30 new electives by 2022. There are also 2 electives oriented specifically for students interested in research activities. The students have a chance to conduct individual research project ending with the defence of Honours Thesis. It is offered on semester 11 which provides several research assistant positions for students within the framework of research projects carried out at the Faculty. Each year around 10 undergraduate students participate in the research within scientific projects conducted at the Faculty. For postgraduate studies (PhD and specialisation studies) the whole teaching programme is built around the newest research findings of the staff, for details see Table 7.1.5.

10.1.2. Description of how the postgraduate clinical trainings of the Establishment contribute to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided

Graduate students attending their PhD studies and postgraduate clinical trainees are involved in teaching of the undergraduate students with 60 to 120 mandatory hours of teaching per year, depending on the position. Most commonly they are employed in the role of teaching assistants in practical classes, however more advanced postgraduate students (i.e. 4th year PhD) and veterinary specialists are offered possibility to run elective modules. The key advantage of their employment in didactics is integration of their state-of-the-art knowledge and specialised skills offered in the mandatory and elective courses for undergraduate students as well as during clinical internships. The POWR programme enabled the postgraduate students with knowledge how to implement the new, student oriented teaching systems and allowed great improvement of their language skills, the fruits of which are being implemented in the form of new electives aimed at development of practical skills of undergraduate students and the new, EU-suggested methods of knowledge and skills verification. Last year the Faculty operated special programmes within European funding scheme, aiming at the continuous education and improvement of teaching skills of young cadre and postgraduate studies (POWR I http://wmw.sggw.pl/category/pr_powr/). Moreover, thanks to two similar programmes, aiming at undergraduate level, over 50 externships for students and nearly 20 visiting professor positions from major European Veterinary teaching establishments were possible just this academic

year (POWR II & III). For the last 3 years, the Leading National Research Centre Scientific Consortium” supported by funding from MSHE (KNOW <http://know.wmw.sggw.pl/>) offered numerous grants allowing postgraduate students to attend 172 international conferences on preclinical and clinical topics. For details see Appendix 10.1.1.

The conflicts concerning management do not arise between different levels of education since the number of patients available for teaching is adequate, also enabling differentiation of severity levels of patients for under- and postgraduate students.

10.1.3. Description of how undergraduate students:

-) are made aware of the importance of evidence-based medicine, scientific research and live-long learning

Following the national guidelines for veterinary education, the importance of the evidence-based medicine, live-long learning and scientific research is emphasised throughout the curriculum. This includes early exposure of students to biostatistics, formulation of clinical and research questions, bibliographic research, critical reading and thinking. There are two electives oriented specifically for students interested in research activities: “Advances in Biomedical Research and Experimental Immunology” and aforementioned individual Research Project ending with Honours dissertation. Each of the mandatory clinical modules and all clinically-oriented electives require written case reports, case studies and differential diagnosis tests and exercises. To promote life-long learning students are encouraged to participate: (i) in the extra-curriculum activities as the clinical volunteers (either in the Faculty Clinics or in the external clinics of their choice); (ii) research circles and (iii) in the research projects conducted at the Faculty. Furthermore, passive and active participation in the scientific conferences is strongly supported with extra ECTS points given for active participants. Within the scheme of POWR I programme, the postgraduate students acquire knowledge in the new educational schemes oriented towards student, language skills, the e-learning methods and are offered scholarships for short educational training visits in the renown veterinary teaching establishments abroad.

-) are initiated to bibliographic search, scientific methods and research techniques, and writing of scientific papers

The seminars based on the literature study is mandatory part of education for every student at the Faculty at all levels of education. They start from early general-science classes and continue throughout preclinical and clinical education. In the latter increasing emphasis is placed on the case studies, with each student writing at least 5 mandatory extended reports from clinical rotations, herd health management and veterinary prevention cases. At the early education stage mandatory classes from handling of library tools, intellectual property and introduction to MS Office are provided for each student. Furthermore, at postgraduate level, classes in research methodology, writing of the thesis, presenting of scientific data, intellectual property and other related topics of interest are provided either as elective courses or invited lectures organised by PhD student council.

-) are offered to participate to research programmes on a non-compulsory basis

As mentioned previously, the Faculty strongly supports extra-curriculum scientific activities of the students. Research activity projects are provided within IVSA, student research circles, and via Honours Project elective at semester 11. Finally, under- and postgraduate students are actively involved in the development of the e-learning schemes which are planned to be introduced into the Faculty curriculum in the following years.

10.1.4. Description of how the continuing education programmes provided by the Establishment are matched to the needs of the profession and the community

Postgraduate programs provided by the Faculty are the response to the requests coming from Polish Veterinary Chamber, the profession and the community. Those requests are communicated to the Faculty by various means, mostly following general assembly meetings. Recently, the Faculty got involved in the frame of ESAVS (European School for Advanced Veterinary Studies) in the:

- Feline Soft Tissue Surgery
- Soft Tissue Surgery I

following the specialisation demand from international forums. Continued education courses are offered by the Faculty or in the frame of international collaboration. Furthermore, every year the Faculty hosts several continued education symposia, conferences and workshops, most with the international renown (. e.g. Hippiatric and Buiatric Congresses, Animal Nutrition Conferences, etc.). Following main events, the academic books featuring extended abstracts and monographic chapters are published annually, covering modern research and current case studies.

10.1.5. Prospected number of students registered at post-graduate programmes for the next 3 academic years

Yearly the Faculty expects 60-70 PhD students (around 20 starting / finishing), around 240 participants at postgraduate courses. This year at least 30 postgraduate students will continue to participate in the EU-funded POWR programme aimed at enhancement of their teaching skills. Furthermore, around 5-10 veterinary Honours students participate in the research performed at the Faculty yearly.

10.1.6. Description of how and by whom research, continuing and postgraduate education programmes organised by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

All programs with relevance to research, continuing and postgraduate education are subjected for approval by the Faculty Council and Rector, as required by Law on Ministry of Science and Higher Education and the Statute of the WULS-SGGW. Decisions of the Faculty Council are supported by the advisory bodies of the FTQAIS and Council subcommittees for postgraduate and PhD programmes. All programmes undergo periodic evaluation by either Faculty or University Quality Assurance Committees. Information on the programme evaluation results is communicated to internal and external stakeholders such as the Faculty Council, University management and Polish Veterinary Chamber. Wherever necessary, there is a procedure within guidelines of the FTQAIS to amend and enhance teaching quality offered at both under- and postgraduate levels.

Table 10.1.1. Number of students registered at postgraduate clinical training

- There is no official veterinary internship program in Poland. Postgraduate students can work as regular veterinarians without any prerequisites.
- The Faculty does not run EBVS residency programme

Table 10.1.2. Number of students registered at postgraduate research training

Degrees:	2017/18	2016/17	2015/16	Mean
PhD	92	69	60	74
Others (<i>specify</i>)	0	0	0	0
Total	92	69	60	74

Table 10.1.3. Number of students registered at other postgraduate programmes (including any external/distance learning courses)

See table 7.1.5.

Table 10.1.4. Number of attendees to continuing education courses provided by the Establishment

Courses/Conferences:	2017/18	2016/17	2015/16	Mean
Conference on 'Molecular biology in diagnostics of infectious disease and biotechnology'	150	145	155	150
Poultry Diagnostic and Serological Interpretation	20			20
Neoplasia diseases in the clinical practice of small animals – part I	40			40
VII Surgery Conference – surgery workshop	12			12
Seminar by Dr Craig Carter from University of Kentucky – Służewiec – 6.10.2018	40			40
Symposium "Healthy Animal – Safe Food"	59	52	56	56
Chances and hazards in dairy cows production – herd reproduction	101			101
EIMERIANA AVIA II – Poultry coccidiosis – current challenges AD 2018	200			200
I European Columbopathological Consultations and 7th Meeting of Columbopathologists	87			87
"Genetic and laboratory tests in monitoring of health and training possibilities in race horses"		130		130
III International Technical Conference PROHEALTH „Sustainable poultry production in post-antibiotic era – practical alternatives to antimicrobials"	450	340	290	360
Kokcydiana – I Poultry Forum „Can we give up coccidiostats usage in poultry?"	155			155
Goat Health – feeding and disease prevention	100			100
FEEVA Disease Surveillance Network meeting	120			0
International Hippiatric Conference	90	85	75	0
13th Conference on the Physiology of Swine Gut	45			45
Biosecurity in sustainable intensive swine and poultry production – low risk Investments with the highest returns!	210	180	190	190
Preconference Symposium to 2015 Digestive Physiology in Pig "Feed additives and their interactions with the pig – state of the art and future developments"	110	90	80	93
Echocardiography I stage	30	26	30	28
VII Congress: Academy for Post-graduates	940	780	650	790

Table 10.1.5. List of the major funded research programmes in the Establishment which were on-going during the last full academic year prior the Visitation (2017/18)

Scientific topics:	grant/year (€)	Duration (Yrs)
Leading National Research Centre "Healthy Animal – Safe Food"	2,143,463	4,5
Entrapment of Hypoxic Cancer by Macrophages loaded with HAP - MCHAP	291,594	5
Entrapment of Hypoxic Cancer by Macrophages loaded with HAP - MCHAP	100,736	5
Dynamics of the gastrointestinal uptake of fluorescent rare-earth-doped nanocrystals, their accumulation regions and possible elimination routes from the organism.	63,424	5,5
Mycotoxins and antibiotics interaction in digestive and immune system - in-vitro-study	99,385	3
Immunological response in the course of natural infection with small ruminant lentiviruses.	70,721	4
The influenza virus A (IAV) on Polish swine farms: epidemiology, monitoring and genetic variability.	91,178	3
Recognition of molecular mechanism of new method cellular aimed delivery drugs to neoplasm.	86,604	3
Remodeling plasma membrane lipid rafts as a tool to restore normal functions of skeletal muscle cells.	57,528	3,5
Sustainable intensive pig and poultry production - PROHEALTH	38,146	5

* These are only 10 major grants from about 45 that were ongoing during last 3 academic years. To see all of them please visit website: polon.nauka.gov.pl

10.2. Comments

Major research activities of the Faculty for the foreseeable future (5-10 years minimum) would be oriented around new, state-of-the-art research facilities (Veterinary Research Centre, Centre for Biomedical Research, Centre for Regenerative Medicine, Genomic Laboratories and Embryology Facility). Main topics covered and planned are nanotechnology for veterinary and human medicine, reconstructive surgery (including stem cell therapies and tissue scaffolding), cancer immunology, genomic variety of domestic animals and cryopreservation of genetic material and *in-vitro* fertilisation of wild and protected species. Those research topics will have great impact on the postgraduate program offer and would strongly influence the teaching of undergraduate and postgraduate students.

The Faculty strongly encourages students to actively participate in the research projects. However, in Polish veterinary education writing a scientific thesis is not mandatory. We predict that yearly at least 5 undergraduate students would engage in the scientific Honours project and similar number would pursue a PhD title.

10.3. Suggestions for Improvement

On the one hand, the Faculty is aiming at providing ever-expanding field of elective modules for undergraduate and postgraduate students. It is expected that students will chose to follow their specific area of interest, whether scientific or professional. This however encounters a strong hurdle of government underfunding of the Universities and the Faculty. To overcome the problem, the proposal of joint electives, funded by means acquired from International Course is now under legal evaluation, with one trial elective running successfully for the last 4 academic years. On the other hand, there is a relative shortage of young scientists willing to engage in the PhD studies, driven mostly by disproportion in the salaries of entry-level academic staff and PhD scholarships and the veterinary practitioners. This is a general problem in Poland. Thus, this year the government started to introduce the major reform in the higher education and research that supposedly would bridge that gap. In the meantime, several approaches are utilised by the Faculty and University officials, like incentives for the application to external competitive grant schemes and funding of the salaries and scholarships from those sources. Within this scheme, for the last 3 years the interdisciplinary PhD studies are offered for 30 postgraduates/year, 3 early stage researcher (ESR) projects/year, as well as numerous scholarships for conference attendance for under- and postgraduate students, in the frame of KNOW. Furthermore, external sources of funding (POWR programmes) were already acquired for the purpose of continuous education of postgraduate students and externships for undergraduates.

11. Outcome Assessment and Quality Assurance

11.1. Factual Information

11.1.1. Description of the global strategy of the Establishment for outcome assessment and Quality Assurance (QA), in order to demonstrate that the Establishment:

-) has a culture of QA and continued enhancement of quality;

The University quality management system was founded on the common understanding of the need to fully assure the highest possible quality of teaching and learning environment, defined by WULS-SGGW Internal Teaching Quality Assurance and Improvement System and 2020 WULS-SGW Strategy. It is based on the decentralised scheme delegating the responsibility for teaching QA to the Faculties over the clearly defined principles. The whole dedicated subpage was created at the University to provide access and understanding of all objectives, structures, procedures and documents: <http://jakoscksztalcenia.sggw.pl/>

-) operates *ad hoc*, cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms;

The key objectives of the Teaching QA Procedure are to:

- monitor the teaching process;
- stimulate continuous improvement of teaching quality at the Faculty;
- monitor the procedures and tools that support teaching;
- define the rules for the verification of the effects of teaching and grading of students;
- increase the level of education of the Faculty graduates and increase their competitiveness in the labour market;
- ensure broad dissemination of information on the Faculty's curricula and teaching QA processes.

The verification of teaching effectiveness involves conducting assessment of the instruction and teaching staff based on:

- the anonymous student questionnaire handled by the WULS-SGGW IT Centre;
- annual anonymous Faculty questionnaires returned by students, performed in accordance with the requirements of teaching quality verification;
- the self-evaluation reports presented by teachers responsible for the module via WEK-form and internal teacher visitation scheme.

Upon the completion of each academic year, a teacher responsible for the module verifies the learning outcomes (via WEK-form), recommending, if necessary, appropriate corrective and improvement measures, resulting from the assessment of verification methods and the level of meeting of the expected outcomes by the students, based on the progress of veterinary sciences. At the same time, Teaching Quality Officer in cooperation with FDTQC, analyses the outcomes of module grading conducted during the year. If any problems are found with achieving the expected learning outcomes, or in other cases considered critical, the Dean, at the request of the Teaching Quality Officer, or upon the request of the student body or stakeholders, shall initiate the measures aimed at enhancing teaching quality (i.e. teacher visitation scheme). Detailed description of the objectives, policies, procedures and entities involved are presented within the FTQAIS. Further development of the study curriculum is carried out with the involvement of the centralised and decentralised management processes, as presented on Fig. A. For details on the expert involvement please refer to Chapter 3.1.10.

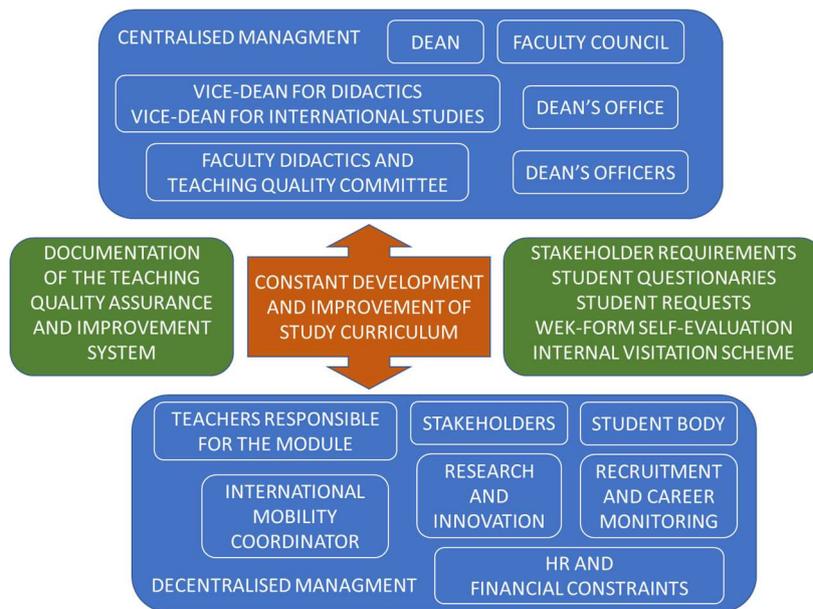


Figure A. Entities involved in the QA and development of the study curriculum at the FVM

-) collect, analyse and use relevant information from internal and external sources for the effective management of their programmes and activities and informs regularly staff, students and stakeholders and involves them in the QA processes and closes the loop of the QA Plan-Do-Check-Act (PDCA) cycle;

University QA system distinguishes two levels of planning-implementation: the strategic goals defined by regulations and decrees at the University level via double loop processes through dialogue with faculties and stakeholders, and Faculty level regulating implementation of the strategic goals to the specific microenvironment of different study processes at various faculties (single loop processes). Specific and predefined feedback-loops, i.e. evaluations, self-assessment and quality monitoring complete the control circuits at both levels and between them. The individual quality targets of the University related to the study and teaching processes predefined in the unified 2020 WULS-SGGW Strategy Document and following, in the case of FVM, the tight regulations of QA (Teaching Standards based on the DESVetArcS and laws and regulations dedicated to the veterinary programme) imposed by the MSHE were subsequently defined and published at the Faculty level as the FTQAIS documentation. Both documents clearly presented individual quality targets at both levels, define the target-operation matrix and specify all the processes, participants and documents of QA. The results of QA procedures are fed-back into the appropriate circuits. All of the processes and procedures are regularly verified and stakeholders are involved in the developmental stages at various levels. The range of specific internal/external participants should be be involved in the specific processes is defined in the appropriate description.

The interactions of the PDCA circuits ensuring quality of planning and conceptualisation, quality of developed structures and procedures and finally quality of results are illustrated by the QA cycle presented on Fig. B.

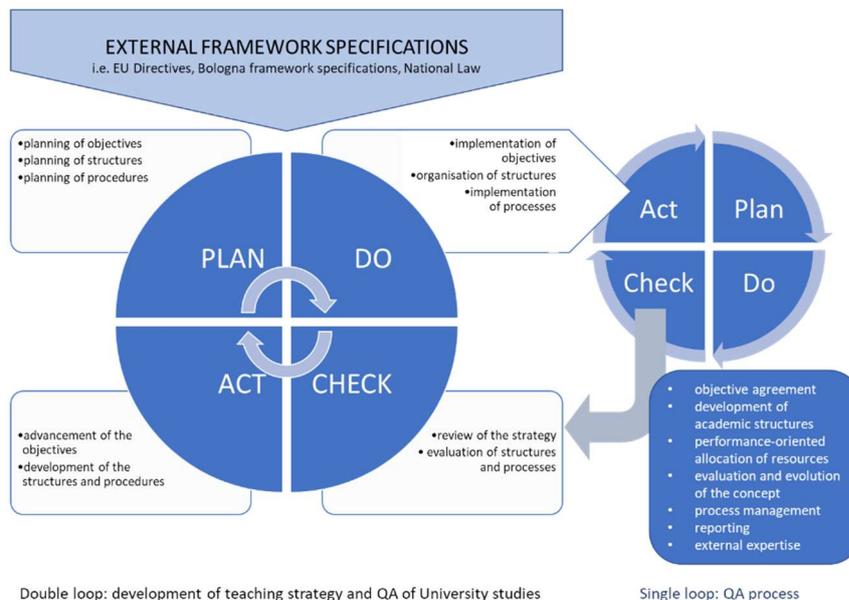


Figure B. Quality management for the university studies at the WULS – FVM

Description of individual processes in the FTQAIS provides the understanding of work-flow interfaces, areas of responsibility and interaction mechanisms within the general framework of the QA loop and underlining legal requirements. The documentation of the relevant process in the field of teaching and studying aims to provide transparency for the process, provide process-related knowledge and know-how for the independent individuals and entities, and finally to ensure the continuous improvement of the process and its dedicated outcome quality. All relevant documents are published in the annual University reports (http://jakoscksztalcenia.sggw.pl/?page_id=35). Based on those principles and in the frame of decentralisation of the QA process, the Faculty-specific FTQAIS was introduced by the resolutions 4 D/2013-14 and 5 D/2013-14 of the Council of the FVM, in 2013. Therein, the full extent of the QA process is provided and explained in detail in FTQAIS. Teaching Quality Policy of the FVM has been established based on laws and regulations, internal rules of WULS-SGGW and recommendations contained in the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ENQA) and is consistent with the Faculty Development Strategy. FVM endorses teaching that is consistent with the most recent achievements of veterinary sciences, labour market expectations and usefulness of the graduates for the economic and intellectual development of the country(ies). To ensure high quality of learning opportunities, expected learning outcomes are defined, universally applied and verified, as well as constantly developed. Teaching QA at the University and FVM applies to all aspects of the teaching process and determines when particular elements of the teaching process meet the requirements of stakeholders. For a model of the teaching QA and development of the study curriculum please refer to Fig. A.

Examples of the key processes of QA applied at the Faculty level are:

- Organisation and management of the international student mobility schemes
 - Planning, organization and evaluation of the curriculum for incoming and outgoing Erasmus students and students outgoing via POWR II scheme
 - evaluation and management of the curriculum of incoming visiting professors within the POWR III scheme
- Evaluation of teaching quality
 - self-evaluation of the module curriculum and student performance (WEK-form)
 - evaluation of the quality of teaching by internal visitation scheme
 - evaluation of the quality of teaching by student questionnaires' (decentralised survey)
 - evaluation of student extramural practice and activities (summer practices, voluntaries)
 - evaluation of the graduate competences via the "Day One skills diary"
 - Continuing development of the teaching facilities; teaching hardware (with emphasis on modern laboratories for clinical training); IT infrastructure

- actualisation and development of traditional and digital library collections

In the aforementioned decentralisation scheme, the QA requirement and processes related to specific degree programme are within the responsibility of the Faculty, represented by the Dean's Office and FDTQC. FDTQC (<http://wmw.sggw.pl/informacje/komisje-wydzialowe/komisja-ds-dydaktycznych/>) is an advisory and consultative body established to coordinate pro-quality measures. It is an independent body with the right to freely formulate any opinions regarding teaching process, and its findings and materials delivered to Faculty authorities strongly contribute to the improvement of teaching process.

The primary tasks of the committee include:

- coordinating teaching quality assurance policy and procedures;
- establishing and improving procedures for European standards on internal teaching quality assurance systems in higher education institutions;
- supervising proper teaching process, including internal teacher visitation;
- monitoring and carrying out periodical reviews of curricula and their effects;
- monitoring the criteria, procedures and results of student assessment of modules;
- verifying the staffing of modules and teaching burden imposed on academic teachers;
- recommending new forms and fields of study;
- stimulating new measures to improve teaching quality;
- conducting reviews and assessments of the teaching process on the Veterinary Medicine programme (full-time, postgraduate), international studies in English and PhD studies;
- developing a programme for internationalisation and flexibility of teaching and learning;
- promoting initiatives for internationalisation and flexibility of teaching and learning;
- nominating awards for teachers for their teaching activity, as well as for students for their learning progress;
- assessing welfare conditions of the students of the FVM;
- assessing and developing a plan for development of continue learning on the Faculty;
- submitting own requests and reviews.

Furthermore, at the Faculty there is a second, decentralised advisory body, i.e. The Consultative Committee of FTQAIS which represents various stakeholders. It is an advisory and consultative body established to consult the assumptions and implementation of the FTQAIS.

The major tasks of the committee include

- presenting expectations of various stakeholders towards the University and graduates;
- cooperating with the Faculty authorities and academic teachers for the development and enhancement of teaching quality;
- consulting the curricula, and recommending new teaching forms and directions;
- providing periodical assessment of the operation of the FTQAIS.

-) is compliant with ESG Standards

The University and the Establishment are positively evaluated and accredited by National Evaluation Agency (PKA), a full member of the ENQA

(http://www.pka.edu.pl/uchwaly/2015/05/12/WMW_SGGW_.pdf).

The University and the Faculty observe internal and external standards and guidelines in the operationalisation and implementation of quality targets, in particular:

- European Standards and Guidelines for Quality Assurance in Higher Education
- Directive 2005/36/EC of 27 October 2005
- Act of 27.07.2005 – University Education Law
- Act of 14.03.2003 on academic degrees and title and on degrees and title in Liberal Arts
- Ordinance of the Minister of Science and Higher Education of 3.10.2014 regarding the standards of education for particular programmes and learning cycles
- Ordinance of the Minister of Science and Higher Education of 29.09.2011 regarding the standards of education for veterinary and architecture studies

- Statute of WULS-SGGW
- Recommendations for quality improvement on teaching and studying with evaluation guidelines, resolutions 4 D/2013-14 and 5 D/2013-14 of the Council of the FVM, in 2013

The study subject specific development of the University and Faculty QA system is carried out in accordance with the Standards and Operating Procedures of the ESEVT, so-called “Uppsala SOP”, 2016.

11.1.2. Description of the form by which the strategy, policy and procedures are made formal and are publicly available.

General University QA scheme is presented at the University webpage (http://jakoscksztalcenia.sggw.pl/?page_id=564), while the FTQAIS documentation (see appendices) is available in Polish and English in the Dean’s Office and the Faculty webpage (wmw.sggw.pl).

11.1.3 Description of the regular publication of up to date, impartial and objective information, both quantitative and qualitative, about the educational programmes and awards the Establishment is offering

The Faculty follows an open-communication culture. Apart from the formal communication processes within the Dean’s Office, FDTQC, and Faculty Council, the informal, institutionalised communication routines include meetings of Faculty lecturers, departmental meetings, meetings of Student Council, topic-specific workshops and training sessions. Those contribute to the exchange of ideas, transparent planning and decision process. All facilitate the broad acknowledgment and understanding of the procedures in studying and teaching. Topics related to studying and teaching are the day-to-day business for FDTQC and a permanent item on the agenda of every Faculty Council meeting. At the later, the Vice-Dean for Students’ Affairs and the Vice-Dean for Foreign Studies inform about current developments. Approved minutes from the Faculty Council meetings are available in the Dean’s Office. Further communication routines at the FVM regarding teaching QA consist of: regular meetings of the Dean’s Council; regular meetings of Senate of the WULS-SGGW and Senate sub-committee for academic affairs; meetings with the Vice-Rectors for Didactics and International Collaboration; meetings with the Student Council and student representatives.

Current, up-to date information on the Faculty, teaching programmes, scientific activities, promotional activities, etc. are available at the Faculty web-page (<http://wmw.sggw.pl>). Detailed information regarding curriculum including study programme, study offer, syllabi are available at the Faculty web-page, which is updated regularly:

- http://wmw.sggw.pl/category/dla_studentow/ for Polish division undergraduate course
- <http://wmw.sggw.pl/en/category/current-studies/> for English division undergraduate course
- http://wmw.sggw.pl/category/dla_studentow/studia-podyplomowe/ for postgraduate studies (both general and specialisation)
- http://wmw.sggw.pl/category/dla_studentow/studia-doktorskie/ for PhD studies

11.1.4. Description of the QA processes not yet described in the other 10 Standards

All relevant QA processes have been described above in the respective sections of current report. The charts and examples showing PDCA cycles at the University and Faculty are presented in figures A and B. Teaching QA process was explained in the above section and presented on Fig. A. Further details regarding the QA processes, quality reports on didactic activities, implementation of surveys, evaluations and obtained external expertises are presented in the FTQAIS documentation (Appendices).

11.1.5. Description of how and by whom the QA strategy of the Establishment is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The University level QA system is implemented at the Faculty via a specifically-adapted process. The individuals responsible for laying down the teaching QA procedures are: Dean, Vice-Deans and Teaching Quality Officer in accordance with their respective scopes of responsibilities. The individuals cooperating in this respect are members of FDTQC, as well as the Heads of organisational units of the Faculty within their competences described in the FTQAIS. The input into the process is provided by EAEVE and ENQA recommendations, consultation with external stakeholders, comments submitted by the teaching staff, students, graduates and Career Monitoring Centre of WULS-SGGW. All processes and results are communicated to the respective entities through the meeting minutes in either the printed or electronic document.

11.2. Comments

The implementation of the teaching QA processes and cycles at WULS-SGGW and FVM in the recent years have greatly increased the administrative workload. However, we strongly believe that the benefits of their implementation, such as: reliable information procedures, early identification of problems and implementation of reliable and effective counteractive measures overshadow the increased workload. In summary, the QA procedures provide the necessary, impartial tools to analyse the general and specific teaching processes, identify specific problems and address them in the most suitable manner. The inclusion of teaching QA system provides the basis for the development of the modern, market-oriented teaching process and will allow to maintain long-term didactic success of the FVM.

11.3. Suggestions for Improvement

The continued development and implementation of the QA processes and broad communication of their results will greatly contribute to the understanding and appreciation of the didactic activities among internal and external stakeholders.

12. ESEVT Indicators

12.1. Factual information

Name of the Establishment:		Faculty of Veterinary Medicine, WULS-SGGW, Warsaw, Poland			
Date of the form filling:		19.02.2019			
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	0,667	0,87	0,59	0,077
I3	n° of FTE support staff involved in veterinary training / n° of students graduating annually	0,238	0,94	0,57	-0,329
I4	n° of hours of practical (non-clinical) training	776,500	905,67	595,00	181,500
I5	n° of hours of clinical training	913,500	932,92	670,00	243,500
I6	n° of hours of FSQ & VPH training	445,000	287,00	174,40	270,600
I7	n° of hours of extra-mural practical training in FSQ & VPH	180,500	68,00	28,80	151,700
I8	n° of companion animal patients seen intra-murally / n° of students graduating annually	57,621	70,48	42,01	15,612
I9	n° of ruminant and pig patients seen intra-murally / n° of students graduating annually	1,128	2,69	0,46	0,664
I10	n° of equine patients seen intra-murally / n° of students graduating annually	0,534	5,05	1,30	-0,764
I11	n° of rabbit, rodent, bird and exotic seen intra-murally / n° of students graduating annually	5,545	3,35	1,55	4,000
I12	n° of companion animal patients seen extra-murally / n° of students graduating annually	1,936	6,80	0,22	1,713
I13	n° of individual ruminants and pig patients seen extra-murally / n° of students graduating annually	35,007	15,95	6,29	28,713
I14	n° of equine patients seen extra-murally / n° of students graduating annually	1,169	2,11	0,60	0,574
I15	n° of visits to ruminant and pig herds / n° of students graduating annually	0,750	1,33	0,55	0,203
I16	n° of visits of poultry and farmed rabbit units / n° of students graduating annually	0,066	0,12	0,04	0,021
I17	n° of companion animal necropsies / n° of students graduating annually	0,792	2,07	1,40	-0,608
I18	n° of ruminant and pig necropsies / n° of students graduating annually	1,233	2,32	0,97	0,263
I19	n° of equine necropsies / n° of students graduating annually	0,040	0,30	0,09	-0,053
I20	n° of rabbit, rodent, bird and exotic pet necropsies / n° of students graduating annually	19,419	2,05	0,69	18,726
I21*	n° of FTE specialised veterinarians involved in veterinary training / n° of students graduating annually	0,242	0,20	0,06	0,179
I22*	n° of PhD graduating annually / n° of students graduating annually	0,055	0,15	0,09	-0,033
¹	Median values defined by data from Establishments with Approval status in April 2016				
²	Recommended minimal values calculated as the 20th percentile of data from Establishments with Approval status in April 2016				
³	A negative balance indicates that the Indicator is below the recommended minimal value				
*	Indicators used only for statistical purpose				

12.2. Comments

- The low value of I3 parameter (FTE support staff involved in veterinary training) results from insufficient financing of support staff maintenance. The support employees are financed mainly by the Faculty own resources, i.e. not included in MSHE grant.
- The low value of I10 parameter (equine patients seen intramurally) is balanced by the high value of I14 parameter (equine patients seen extramurally)
- The explanations of low value of I17 (companion animal necropsies) and I19 (equine necropsies) parameters:
 - In 2016, the inspection of PKA did not reveal any abnormality of the number of performed necropsies
 - FTQAIS did not reveal any deficiencies in the number of equine and companion animals necropsies
 - It was only this report (SER) for EAEVE to reveal the deficiencies in this context
- The low value of I22 parameter (PhD graduating annually) results from the current regulations of PhD studies, i.e. the lack of the latest data when the doctoral dissertation should be delivered. PhD students are interested to finalize the studies because the status of a student enables them to use scholarships, various allowances, public communication discounts, etc.

12.3. Suggestions for improvement

- Increased financing of support staff employment from MSHE resources
- In order to increase the number of equine and companion animals' necropsies:
 - An arrangement between the Department of Large Animals with Clinic and Department of Small Animals with Clinic was signed up to hand over animal carcass
 - Additional resources for carcass utilization were found
 - According to new syllabus of Pathomorphology, it is necessary to present approved protocols of performed necropsies as a part of the final credit
 - Further improvement of FTQAIS is foreseen in order to consider EAEVE indicators in the verification process of quality assurance

Glossary

CBC – Complete Blood Count
CSF – Cerebrospinal Fluid
CT – Computed Tomography
DCIEPT - Deans' Coordinator For Intra And Extramurally Practice Teaching
DESVetArcS – National Decree on Education Standards for Veterinary and Architecture Studies
DO – Dean's Office
DSA - Vice- Dean for Students' Affairs
DVM – Doctor of Veterinary Medicine
EAEVE - European Association of Establishments for Veterinary Education
EBVS - European Board of Veterinary Specialization
ECOVE - European Committee on Veterinary Education
ECTS - European Credit Transfer System
EDUROAM - international roaming service for users in research, higher education and further education
eHMS – electronic Dean's Office platform
ENQA - European Network for Quality Assurance in Higher Education
EPT - External Practical Training
ESEVT - European System of Evaluation of Veterinary Training
ESG - Standards and Guidelines for Quality Assurance in the European Higher Education Area
EU – European Union
FDSD – First Day Skills Diary
FDTQC - The Faculty Didactics and Teaching Quality Committee
FSQ - Food Safety and Quality
FTQAIS - The faculty teaching quality assurance and improvement system
FTE - Full-Time Equivalent
FVM – Faculty of Veterinary Medicine
IMS – International Medicine Studies
IVSA - International Veterinary Students' Association
IT - Information Technology
KNOW – Leading National Research Centre (Krajowy Naukowy Ośrodek Wiodący)
MSHE – Ministry of Science and Higher Education
NCBR – National Centre for Research and Development
OSA - Occupational Safety And Health
PDCA – Plan-Do-Check-Act
PKA – National Evaluation Agency
POWR – Knowledge, Education, Development Program – MSHE Grant
QA - Quality Assurance
QT – Quality of Teaching
SAO - Student's Affairs Office
SER - Self Evaluation Report
SOP - Standard Operating Procedure
SR – Study Regulations
SWOT - Strengths, Weaknesses, Opportunities, Threats
SDSPCT - Student's Daybook of Summer Practice and Clinical Training
TCI – Transcervical Insemination
VPH - Veterinary Public Health
VTH - Veterinary Teaching Hospital
WEK - Verification of Teaching Effects Paper
WULS-SGGW – Warsaw University of Life Sciences (Szkoła Główna Gospodarstwa Wiejskiego w Warszawie)

List of appendices

-) Current academic staff, qualifications, their FTE, teaching responsibilities and departmental affiliations

-) 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

-) Maps of the Establishment and the intra-mural and extra-mural facilities used in the core veterinary programme

See appendix 4.1.1

-) Written assessment procedures for QA – FTQAIS

See appendix: FTQAIS

See also at <http://wmw.sggw.pl/en/category/current-studies/ftqais/>

-) List of scientific publications from the Establishment's academic staff in peer reviewed journals during the last three academic years

Because of the large volume of this material it is not included here. Please visit:

<http://wmw.sggw.pl/wp-content/uploads/List-of-scientific-publications.pdf>

for details.

-) Other relevant documents

- Appendix 1.1.3 – Strategic objective metrics, from the perspective of BSC and strategic themes
- Appendix 3.1.5 – Clinical rotations details
- Appendix 3.1.7 – Detailed elective options for polish and IMS students
- Appendix 4.1.1 – Campus map and localization of the premises used for the veterinary curriculum
- Appendix 4.1.2 – Premises for lecturing, group work and practical work
- Appendix 4.1.4 – Premises for clinical services, diagnostic services including necropsy and FSQ&VPH
- Appendix 9.1.1 – DVM Practitioners teachers on temporary contract
- Appendix 10.1.1 – Postgraduate and undergraduate students participating in the KNOW-supported conferences