



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Lietuvos sveikatos mokslų universiteto

VETERINARINĖS MEDICINOS PROGRAMOS (valstybinis kodas
601D20001, 60112B101)

VERTINIMO IŠVADOS

EVALUATION REPORT

OF VETERINARY MEDICINE (state code **601D20001, 60112B101**)

STUDY PROGRAMME

at University of Health Sciences in Lithuania

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DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Veterinarinė medicina</i>
Valstybinis kodas	601D20001, 60112B101
Studijų sritis	Biomedicinos mokslai
Studijų kryptis	Veterinarinė medicina
Studijų programos rūšis	universitetinės studijos
Studijų pakopa	Vientisosios
Studijų forma (trukmė metais)	Nuolatinė (5,5 m. trukmės)
Studijų programos apimtis kreditais	336 ECTS
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Veterinarinės medicinos magistras, veterinarijos gydytojas
Studijų programos įregistravimo data	1997 05 19, Nr. 565. Pradėta vykdyti 1936 m

INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	<i>Veterinary medicine</i>
State code	601D20001, 60112B101
Study area	Biomedicine sciences
Study field	Veterinary medicine
Kind of the study programme	university studies
Level of studies	Integrated (first and second level)
Study mode (length in years)	Full-time (5,5 years)
Scope of the study programme in credits	336 ECTS
Degree and (or) professional qualifications awarded	Master of Veterinary Medicine, Veterinary doctor
Date of registration of the study programme	1997 05 19, No. 565. Pursued since 1936

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I. INTRODUCTION

Programme evaluated

The study programme of Veterinary Medicine has been started together with the establishment of the Lithuanian Veterinary Academy in Kaunas and the construction of its premises in 1936. The demand for the Veterinary Surgeons has always been high in Lithuania although the profile of their activities has changed significantly during last decades due to the (a) new trends in the agricultural production; (b) growing interest for companion animals; (c) new tasks for the surgeons in food and feed surveillance; (d) spread of the methods of biomedical research within the veterinary praxis.

Integrated studies, which lead both to the professional qualification of Veterinary Surgeon and academic Master's qualification, which is a prerequisite for further Doctoral studies, have been established in present form since 2004.

In 2010 Kaunas Medical University and Lithuanian Veterinary Academy were merged to form Lithuanian University of Health Sciences (LUHS). Strategic objective of the LUHS is to provide the university level higher education, which is based on the research in biomedicine.

The Evaluation Team

The chairman of the team: Prof. Indrikis Muiznieks, Dr.biol., Vice-Rector of the University of Latvia, Latvia; team members: Prof. Marc Vandeveld, Dr.med.vet., University of Bern, Switzerland; Prof. Rimantas Rakauskas, Habil. Dr. boil. (zool.), Lithuania; Asoc.Prof. Arvo Viltrop, Dr.med.vet., Estonian University of Life Sciences, Estonia; student Ms. Kristina Daniūnaitė, University of Vilnius, Lithuania.

The procedure of the evaluation

The Self Evaluation Report (SER) of the Veterinary Medicine Programme was made available to the expert team in September 2011. All the members of the expert team examined the SER individually, preparing draft reports and indicating problem questions or discussion points. The experts obtained further information during the site visit on October 27 through interviews with Programme co-ordinators, Department heads, senior and junior members of the teaching staff, students, graduates and employers. After the visit, on October 28 the expert group held a meeting, discussed the contents of the evaluation report and agreed upon the numerical evaluation of every section of the evaluation. The questions, which needed additional comments from the authors of the SER were identified and forwarded to the LUHS. After receipt of the answers from the LUHS (until November 4) the expert team members prepared final versions of their reports, which were integrated into one document by the chairman of the team.

II. PROGRAMME ANALYSIS

1. Programme aims and learning outcomes

The programme aims and learning outcomes are clear and well defined, but some improvements can be suggested as outlined below. The programme aims and learning outcomes comply with the requirements for knowledge and skills of the persons, who have acquired training as a Veterinary Surgeon, listed under the Article 38 point 3 Directive 2005/36/EC on the Recognition of Professional Qualifications, what is the prerequisite for its international recognition of the qualification conferred by LUHS. After 5,5 years of studies the graduates are awarded professional qualification of the Veterinary Surgeon and academic qualification – Master's degree in Veterinary Medicine. The graduates are authorized to start immediate professional activities, although regular re-certification by the national Association of the Veterinary Surgeons expected. The graduates are eligible also for further doctoral studies or residency in specific field of veterinary surgery.

Special competences, which are obtained by the students as the learning outcomes during the studies at LUHS, are defined and subdivided in five categories, which may be identified as “Examination and Diagnosis”; “Treatment”; “Epidemiology”; “Food/Feed Safety”; “Animal Welfare”. The list of the competences under first two titles is overlapping, e.g., assessment of animal health and diagnosis of the diseases clearly are outcomes related to the examination skills, although they are named again among treatment skills, thus compromising the clarity of definitions. More attention should be paid to the precise understanding of what clinical skills should be acquired within the programme.

General competences are divided into two groups, which may be identified as “Practitioner skills” and “Research Aptitude”. Practitioner skills secure the fitness of the graduates for labour market, especially for the work in private clinics and for entrepreneurial activities. The expert group took on notice that the research preparedness of the graduates is expected to be limited solely by the acquisition and distribution of the information. Apparently there still is a place and possibilities to upgrade the skills in planning and executing experimental work. The programme includes 10 CP Master Thesis work – this should be used for more targeted development of the competences in biomedical research.

The statement on the programme aims and expected learning outcomes are publicly accessible on the internet, most of the information is published in Lithuanian; well-prepared information in English is available too.

The programme in Veterinary Medicine in Lithuania is implemented only in the LUHS. There is a constant need for specialists in this area in Lithuanian labour market. During the meetings with

the staff, students and, especially, with the employers the expert team obtained overwhelming justification of the need for the Veterinary Surgeons in the Lithuanian agricultural, food-processing and other industries. There are about 2500 Veterinary Surgeons working in Lithuania and the capacity of the programme is hardly satisfactory to secure the turnover of the specialists in different fields of veterinary activities both in public and private sectors. The students frequently get employed already during the time of studies.

The tendency towards development of research-based studies is strongly emphasized in the mission statement of the LUHS. Although the programme in Veterinary Medicine is based on extensive basis of academic subjects, the research development in specific fields of biomedical science, which are related to Veterinary Surgery, should receive more attention to increase the international visibility of the research achievements of the faculty and also of the students, what is important to strengthen the justification of the academic aims and learning outcomes of the programme.

The faculty and the infrastructure available at LUHS secure the possibilities to attain the aims of the integrated programme, which provides both academic and vocational qualifications and learning outcomes, which are defined by national and international authorities. The duration of the studies in Veterinary Medicine programme is 5,5 years, the minimum time demanded to obtain the qualification of the Veterinary Surgeon by the EC Directive is 5 years. The programme addresses wide assortment of academic and practical subjects demanded by international regulations and it is supplemented by a set of subjects in humanities and social science as it is mandatory according to national regulations. In general the studies within the programme are organized according to well established traditions of the university curricula. The university level of the studies is justified by the eligibility of the graduates from the Veterinary Medicine programme for further doctoral studies.

The name of the programme, its learning outcomes, academic and practical content of the studies as judged by the information provided to the expert team through SER, study course descriptions and CV of the teaching staff, as well as by the information obtained during the site visit at the Veterinary Academy of LUHS, is fully compatible with the offered qualification. The expert team would like to encourage further preparation of the institution for the accreditation by European Association of Establishments for Veterinary Education (EAEVE), which would eventually include improvements in clinical training of the students, more targeted delivery and transparent record of the students' practical experience, modernisation of the clinical infrastructure, development of research activity and more focus of the staff on the core activities within Veterinary Medicine programme.

Main strengths and weaknesses

Strengths

- The aims and learning outcomes of the programme comply with national and international regulations set forth for the Veterinary Surgeons.
- Programme integrates academic and professional studies at the university level.
- Programme is unique in Lithuania, the labour market demand for the graduates is high and they are able to start professional activities immediately after graduating.

Weaknesses

- The learning outcomes, which characterize the clinical skills and research aptitude of the graduates, are not defined in sufficient detail and clarity.
- The programme is not accredited by EAEVE.

2. Curriculum design

The curriculum design strives to be conforming to the EU directive (2005/36/EC) on veterinary training. The latter contains a list of subjects grouped in five categories: basic subjects, clinical subjects, food hygiene/public health, animal production and professional knowledge. All the basic subjects such as Anatomy, Physiology, Biochemistry, Genetics, Microbiology, etc. are covered with large numbers of hours. Professional ethics is also listed in the study plan. The animal production subjects like animal nutrition, animal husbandry and rural economics are all represented in the study plan. Veterinary food hygiene / public health is represented with more than 700 hours covering a wide variety of themes which are commonly associated with this area. This also includes practical work in places where slaughtering and processing of foodstuffs takes place.

Conformity of the curriculum to the directives should be improved and made more transparent in the section of the clinical sciences. Obstetrics, Pathology (including Pathological Anatomy), Parasitology, Radiology, (diagnostic imaging) Veterinary State Medicine and Public Health, Veterinary Legislation and Forensic Medicine (all listed in the EU directives as „clinical subjects“) are represented in the curriculum outline. Reproduction and reproduction disorders are taught in the module Obstetrics and Gynaecology. The expert team discovered during the visit that clinical subjects are also included in the „Non-infectious Diseases“ lecturing block, a nomenclature which is not used elsewhere. This block contains internal medicine and clinical examination methods. There is a sprinkle of clinical topics in the optional courses but no comprehensive coverage.

Important area of professional knowledge is taught in the course: “Professional Ethics and Career Development”.

There are a relatively large number of compulsory subjects which are not required by the EU directives. These subjects do not necessarily seem to support the veterinary training in the strict sense. This problem is recognized by the faculty but apparently there are national laws to comply with.

There appears to be an even spread of the work load in lectures and practical exercises over the 5,5 years of the curriculum. The faculty has taken measures to avoid overlapping or repetition of the contents. The number of hours/ECTS allocated to each subject obviously varies according to the importance given to each subject, which may vary from region to region. The Lithuanian veterinary curriculum is quite traditional in this respect. The number of contact hours is high. The basic subjects consume a considerable portion of the curriculum. Notably, the morphological sciences, like Anatomy and Pathology, have very large numbers of hours. The same refers to the subjects related to food hygiene/public health and animal production, thus the agriculturally oriented part of Veterinary Medicine clearly has the priority.

The number of hours devoted to clinical subjects is rather low. The latter is also reflected in a low proportion of clinicians within the teaching staff as listed in the Annexes to the SER. However, we learned at the visit that much of the clinical staff is not considered to be teaching, although they have to supervise and instruct students in the clinics. If compliance with the EU directives is desired it is important to note that, according to the latter, the time allotted for training in clinical sciences should account for minimum 40% of the entire curriculum. It appears that particularly the time available for practical clinical work is limited to 80 hours of clinic rotation per year during final four years of studies, which are fragmented in units of one day at the time or even less. In addition, there is a practice period for 8 weeks, which is, however, ill defined since it could involve any kind of professional activity.

The content of the subjects is similar to what is taught in other countries in the same subjects. The training offered is clearly at the university level. The SER states that the curriculum design secures that new subjects/contents are always based on previous lectures/courses and that the practical exercises are only conducted when the theoretical foundation was laid in preceding lectures. This principle applies to the curriculum design as a whole, which, as in many other veterinary schools, starts in the first years with basic subjects covering the normal organism, addressing the abnormal in subsequent courses, and implementing practical and clinical applications at the end of the curriculum. Thus, there is a logical progression within the curriculum. Nevertheless, this traditional approach can be considered to be fractionated since there is very little integration between the subjects. In modern curricula, there is at least horizontal integration in the basic sciences, e.g. between anatomy and physiology. In more

advanced ones there is also vertical integration between basic and clinical subjects, which leads to more effective teaching.

On the whole the learning outcomes have been extensively defined. It is clear that the theoretical foundation for all the expected skills at the time of graduation is provided in the curriculum. There is an extensive basic science part and the major areas of veterinary professional activity are covered. There is also practical training in these areas. The balance of theoretical, practical and individual learning appears to be good. However, the latter is not always consistent; in some subjects students receive specific tasks, the products of which are then discussed in the subsequent lecture, in others the students are pretty much left to themselves.

The training in the clinical disciplines may be somewhat too sparse to achieve the learning outcomes as defined. Especially, the training in practical skills is very limited although students told that additional clinical training is always possible on a voluntary basis.

Much of the teaching is conventional class teaching. Recently introduced teaching approaches, such as interactive learning, group work and problem based learning (e.g. simulation of practical situations), should help to prepare the graduates to systematically analyse and solve problems in daily practice.

The Master Thesis is an important part of the training and the faculty has laid down precise rules for the students. The Thesis work should represent an excursion into scientific research and also involve reading scientific articles as well as scientific writing. Wide variation in the scope and quality of the Master Thesis produced in the previous academic years was found by the expert team. Some represent a true piece of research with hypothesis, project design, literature search, statistical evaluation etc, while others are of a pure descriptive nature, sometimes on quite trivial topics. It would therefore be unrealistic to expect that the intended learning outcome in terms of research proficiency is always met. In view of the enormous teaching load of the faculty it may not be possible to provide sufficient guidance for every student's project. It would be more prudent to describe the objective of this part of the curriculum as to make the students familiar with some basic concepts of research rather than to prepare them to do independent research.

The scope of veterinary activity is very wide. According to the EU directive it is expected that the curriculum prepares the students in all areas of Veterinary Medicine. The scope of the programme at the LUHS is consistent with the old concept of the omnicompetent veterinarian.

The expected skills at the time of graduation (learning outcomes) in the traditional areas, such as animal production, food safety and veterinary public health, should be ensured. Since Veterinary Medicine has evolved rapidly towards companion animal care in recent years, more and more veterinarians depend on this aspect of the profession for their income, while at the same time modern agriculture requires less (although highly qualified) vets. This evolution is obviously

also taking place in Lithuania. Therefore, the clinical part of the curriculum may be underdeveloped. The interview with members of the profession, representing the whole spectrum of veterinary professional activity (many of them being employers of fresh graduates) revealed that on the whole the graduates of the LVA were considered to be well prepared to enter their professional career. However, while the broad spectrum Veterinary Diploma is still considered to be ideal by most, some measure of tracking in the undergraduate curriculum was considered to be desirable by several participants. Tracking would prepare the graduates better for their chosen domain of professional activity.

The content of the programme generally reflects current standards of Veterinary Medicine and is well supported by competent staff and adequate facilities supporting basic science subjects. The clinical area both in facilities and equipment is rather outdated. In addition, the clinical staff is small and lacks specialists in many areas. The content of the clinical programme does not reflect the current state of the art of clinical Veterinary Medicine. The summaries of recent Master Thesis, which were provided in the information package of the SER, show that there is a wide range of research activity in many areas of Veterinary Medicine on topics which are also investigated elsewhere in the world. It is clear that at the university the teaching is research based, which ensures that the teaching programme has an international standard. As the teachers of the academy have an enormous teaching load since additional undergraduate programmes have to be covered alongside with the Veterinary Medicine, very limited time for research is left. We also noted that many teachers of the academy publish most of their research in the local veterinary journal. There are very few publications in international scientific journals with appropriate impact.

Main strengths and weaknesses

Strengths

- The curriculum is consistent with EU directives on veterinary training.
- There is a good balance between theoretical and practical work.
- The recent introduction of new teaching methods.
- All major areas of Veterinary Medicine are covered.
- The students receive a solid basic science education.
- The curriculum ensures that the learning outcomes are met in most areas of Veterinary Medicine.
- The Master Thesis is an important part of the curriculum.
- An excellent rating among the Lithuanian veterinary profession.

Weaknesses

- The curriculum is traditional; further integration between the disciplines should be encouraged.
- Absence of tracking and very limited electives.
- There are still a large number of contact hours, what impedes the development of self-dependent learning skills of the students and hampers the research activities of the academic staff.
- The structure of the clinical part of the curriculum is not transparent.
- The scope and quality of the Master Thesis is highly variable and therefore the outcome objectives for research are not always realistic.
- The time devoted to clinical subjects, in particular the practical training cannot be unambiguously identified within the curriculum.
- The research base of the teaching is not as solid as it should be.

3. Staff

Most of the staff involved in the realisation of the programme meets the legal qualification requirements. Nevertheless at closer inspection of the staff CV data provided by the LUHS, we found some instances where the point of the performance improvement could be actualized. Even among the senior staff members, researchers and lecturers, the instances can be found where only one or two scientific papers in the journals that are refereed in the Web of Science database have been published during the last five years, or the papers have been published in journals that are hardly relevant to the field of veterinary studies, e.g., *Elektronika ir elektrotechnika*. Noticeably, many scientific papers of the staff involved in teaching programme (11 Professors and seven Assoc. Professors) are mostly published in the local journal of the Veterinary Academy, LUHS: *Veterinarija ir Zootechnika*. Its impact factor is low (0.165, 2009), and some papers are published only in Lithuanian. Such papers can hardly be considered of high international importance, although they help their authors to meet legal requirements on publishing performance.

Qualification of the most of the teaching staff, including scientific and academic degrees, is adequate to ensure learning outcomes and meet the requirements set forth by the Lithuanian legislation. Yet qualification of some teachers seems to be inappropriate, discrepancies in teaching activities and research qualifications could be found. A lecturer who is teaching Informatics and Statistics has published on non-relevant topics of pig breeding, a lecturer of Applied Ethology and Animal Welfare, Ecology and Environment Protection – on Animal Physiology and Clinical Diagnosis; a lecturer of Fishery and Small Animal Selection - on Cattle

Production. The research papers of the Professor who teaches Hygiene and Technology of Aquatic Animals and Fish Product Hygiene concern cattle and sheep products. Two lecturers have declared no scientific interest and any field of research; one lecturer did not declare any scientific paper; one Associated Professor has published just two proceedings in local conference meetings. The expert team has a serious concern if the number of partitioning clinicians involved in realisation of programme is adequate to ensure learning outcomes.

The number of the teaching staff is adequate to ensure learning outcomes. Student groups of 18-20 students per teacher for laboratory and practical work and 9–10 students per teacher for special practices might appear somewhat large, but this is a common situation in Lithuanian universities. The same is true concerning the ratio up to 5 master degree students supervised by one teacher. The ratio permanent teachers/students 1:8,5 (in the academic year 2010/11) is adequate to ensure learning outcomes when viewed in the frame of single teaching programme. This ratio meets the EAEVE indicator (9,11) for the no. of total academic FTE in veterinary training vs. no. undergraduate veterinary students¹. Nonetheless, the real load of contact teaching hours is too big (in contact hours per teacher per academic year). The situation might be explained by the participation of the same staff not only in Veterinary Medicine study programme, but also in the other study programmes, which are implemented by the same institution. The involvement of the staff in three programmes may compromise the EAEVA accreditation. Noticeably, the ratio of the ancillary staff, technical assistants, to teachers 1: 2,4 (EAEVA indicator 0,58 – 2,11) is very good ensuring the possibility of high quality practical training of students.

The turnover of teaching staff ensures an adequate provision of the programme. At present the motivation of the university staff remains high; therefore the main causes for the turnover of the teachers are either the promotion to higher positions or the retirement, or maternity leaves. Cases of changing job affiliation are rare. For the most of the subjects there are two teachers available, what ensures the possibilities of emergency replacement.

When a member of the staff leaves, his position is opened and can be taken by a young scientist. The current list of personnel shows the balanced age structure of the staff ensuring sufficient replacement of the eventually retiring teachers by the upcoming younger professionals. In most cases the new personnel is recruited from the local graduates of the Doctoral studies at the Veterinary Academy. This secures the continuity of traditions, but might be also taken for some kind of the risk of self isolation.

¹ Guidelines, Requirements and Main Indicators for Stage One (Ia) and Stage Two (Ib), Lyon, France, May, 2011

LUHS enables the professional development of the teaching staff what is sufficient for the provision of the programme under evaluation. Analysis of the teachers' CV's indicate that the improvement of professional skills and qualifications takes place on regular basis through participation in conferences, seminars, workshops, training sessions, exchange programmes (Erasmus), etc. This corresponds to the figures given in SER (Table 8 on p.18). Nonetheless, the overload of contact teaching hours creates certain problems when concerning professional development of teaching staff. Extended periods, up to one academic year, of upgrading and sabbatical leaves are not established within the regular schemes of professional development in LUHS.

Not all of the staff is involved in the research, which is directly related to the study programme and to the subjects he/she is teaching. Detailed analysis of some discrepancies, which may be attributed to some 10% of the whole staff number, is provided in the second section of this chapter.

Main strengths and weaknesses

Strengths

- Veterinary Academy at LUHS has gathered together most of the best experienced Veterinary Medicine professionals of Lithuania.
- Most of the staff involved in realisation of programme meets the legal qualification requirements; their qualifications are adequate to ensure learning outcomes.
- For the present, motivation of university staff remains sufficiently high.
- The turnover of teaching staff ensures an adequate provision of the programme.
- The improvement of professional skills and qualifications is performed on regular basis by means of participation in conferences, seminars, workshops, training sessions and short-term exchange programmes.

Weaknesses

- The level of the research of the most of the staff involved in realisation of the teaching programme should be improved seeking for the higher international standards.
- Scientific papers must be published not only in the local journal *Veterinarija ir Zootechnika*, but also on broader international scale.
- The teaching load of the lecturers (in contact hours per person per year) is too high and may impede the research activities.
- Teaching of clinical subjects, especially clinical practice, demands substantial improvement. This particularly concerns the small animal clinic.

4. Facilities and learning resources

Premises for studies, as presented in SER, are sufficient both in their size and quality. This is clearly represented by the figures in the text and Table 11 on p. 21 of SER. This was also confirmed during the site visit. Ongoing and planned reconstructions of some premises (e.g. Large Animal Clinics, Centre for Animal Breeding, Anatomical Prosectorium, and Chemical Lab) will substantially improve their quality. Yet the Small Animal Clinic requires a substantial improvement both in size and equipment.

Teaching and learning equipment (laboratory and computer equipment, consumables) are sufficient both in size and quality, as it is presented on pp. 22-23 of SER. Multiple funding sources (listed on pp. 22-23 of SER, and reaching up to 60 mln. litas) are combined to improve the quality of premises and installing modern equipment. Nonetheless, the equipment in small animal clinic is mostly outdated and requires to be substantially renovated.

LUHS has adequate arrangements for students' practice, as is reflected in the listing of available basic practice sites on p. 24 of SER. This was generally confirmed during the site visit, although some practical facilities demand substantial renovation. Some of the students having participated in the meeting at the visit in HEI have complained that they have to pay themselves for consumables needed for their practical work when preparing Master Thesis.

Teaching materials (textbooks, books, periodical publications, databases) are satisfactory when compared to available funding. LUHS has made an essential improvement of library facilities and resources since the last expert evaluation of teaching programme. This statement is confirmed by the information given on pp. 24-25 of the SER, also by site visit at the library of the Veterinary Academy. Nonetheless, library operating hours should be prolonged.

Main strengths and weaknesses

Strengths

- The concentration of the resources within LUHS provides new possibilities for the Veterinary Academy to cooperate with the Medical Academy and research institutes, who are integrated into one academic establishment.
- Veterinary Academy at LUHS is situated in a separate campus having most of the necessary facilities and teaching resources brought in close proximity.
- Multiple local and international funding sources, including the Structural Funds of the EU, are successfully combined to improve the quality of premises and to obtain modern research and study equipment.

Weaknesses

- The small animal clinic requires a substantial improvement both in its size and equipment, which is mostly outdated.
- The same concerns Large Animal Clinics, although its renovation is already starting.

5. Study process and student assessment

The admission requirements are well-founded and thorough. The admission is organized according to the rules for general admission to undergraduate and integrated studies at Lithuanian higher education institutions (LAMA BPO) after revision and approval by the Senate of LUHS. Requirements of the admission are clearly formulated and accessible on the internet webpage of LUHS (<http://www.lsmuni.lt>). Candidates having at least secondary or equivalent education can participate in the competition. The main admission criterion is a competition score (*numerus clausus*) calculated from secondary school final examinations (Biology, Chemistry, Lithuanian language) or grades (Foreign language) in the disciplines, which are adequate to the studies in Veterinary Medicine. International students are admitted, if they provide the legalized high school or college certificate with its official translation in English and meet the Entrance Examination.

The teaching and training facilities are situated close to each other. Thus, rational timetables of lectures and practical training are drawn. The workload per week is distributed expediently, each day comprising two or three lectures and seminars or practical training exercises. There is no overlapping of the lessons, but some groups have large gaps (four hours and more) between contact hours or, on the contrary, not all the timetables include lunch breaks. However, during the meeting students had no complaints and stated that the schedules are flexible enough. According to the schedules that are easily accessible on the internet and in contrast to what is stated in SER, duration of the studies exceeds more than 30 academic hours a week during the first three years of the curriculum, resulting in more than 6 hours of workload per day.

Various forms of the organization of studies are being practiced: during the first years the studies are planned in semesters, later on – in cycles; the transition to modern learning strategy through problem-solving is in progress. At senior courses more time is given for individual work. The development of the forms of the organization of the studies within the curriculum supports the student-centered learning and attainment of the learning outcomes of the programme.

Practice places for Veterinary Medicine students are secured by tripartite agreements among the student, LUHS, and the establishment where the practice is implemented. The list of the enterprises for practice is provided by the manager of the Career Centre; alternatively, the students may propose it by themselves. The established system of organizing practical

placements is flexible and allows the students to adjust their specialization to labour market demands. The extension and consolidation of the time of practical placements within the curriculum would be in line with the EAVEA requirements.

The annual budget is allocated for the realization of the whole study process including the funding for the preparation of the Master Thesis of students. However, during the interview a few complaints were heard from students that the funding for the preparation of their Master Thesis might not be sufficient and collateral payments for the research materials are demanded if the students want to select some specific research topics. This situation should be rectified by introducing transparent regulations on the principles of financial support for the Master's Thesis project.

The students of the Veterinary Medicine programme show strong motivation and are active members of Student Scientific Society (SMD), which publishes research abstracts of students' works every year. Students also attend conferences of SMD or conferences at other faculties in Lithuania or abroad. The students confirmed that they are well-informed and greatly encouraged by the teaching staff to participate in research activities and publicize their works. Students' involvement in the implementation of projects is commendable and should be further encouraged. The needs for harmonic development of the personality and self-expression of students are met by several cultural activities (e.g., choir "Juventus"). Furthermore, well-equipped modern sports facilities are available for both elective subjects and free time activities. Students are well-informed and take part actively in three exchange programmes: LLP/Erasmus, Nordplus, and NOVA-BOVA academic network. While the number of leaving students is relatively stable, the number of arriving students was increasing during the years 2006-2010, what shows, as it is stated in the SER, that the study programme acquires international recognition. Constant attempts, e.g. participation in international student fairs, are undertaken to improve the ratio of arriving and leaving students.

The academic support throughout the study process is ensured by various means. In the first semester of the studies the students have Introduction to Education and Information Technology, which aims to familiarize the students with the goals and objectives of the programme and with the approaches used to assess their study progression. Essential information is provided by the teachers and it is also available on LUHS website, both in Lithuanian and English. The important development at LUHS is the Career Center who helps the students to find the most appropriate practice and employment opportunities both during the studies and at graduation. The students feeling, which was clearly articulated at the meeting with the expert's team, was that all the staff is willing to help and provide all the possible information or support that is needed to support the studies. Social and promotional scholarships are granted in accordance with the documents

approved by the Senate. However, the deficiency of funding for promotional purpose is recognized by the faculty and mentioned as one of the weaknesses of the study programme in SER.

The assessment principles and criteria are defined in LUHS study regulations and clearly expressed in publicity and permit adequate assessment of student's performance. All relevant information regarding study issues could be easily found on the webpage of LUHS. Various methods, depending on the didactic aims, are used for assessing the achievements (case analysis, project tasks, discussions, etc.). Students are directly informed on the study results, what is also reflected in the internet database. Both the teachers and the students are informed about the marking conditions and they are generally respected, although at familiarization with students' final works and examination materials some cases of discordant evaluation by different assessors were noticed. During the interviews few students also made a point about the uncertainty of the topics, which would be included in the interim assessments.

The absolute majority of the graduates from the Veterinary Medicine study programme are employed already at the time of studies or shortly after the graduation. According to the surveys carried out by Career Centre, the graduates are employed mainly within the profession they have acquired at LUHS or their job profile is close to that. Two of the 53 respondents, recent graduates, had their own businesses at the time of survey (2010). These facts testify the quality of the acquired training and the expectations about the job possibilities. Thus, the professional activities of the graduates clearly meet the expectations of the programme providers, although a large drop out rate of students remains a problem.

Main strengths and weaknesses

Strengths

- Specialists of Veterinary Medicine are of great demand; the graduates enjoy a very high employment rate.
- The study programme gains popularity among international students.
- The teaching and training facilities are close to each other.
- Transition to modern learning strategies.
- Increasing students' involvement in scientific researches is commendable.
- Active participation in student mobility programmes.
- Students receive adequate academic support.
- Most of the graduates are employed by the profession acquired.
- Clear and adequate assessment principles and criteria.
- Variety of assessment methods.

Weaknesses

- The schedule of some groups of students in first three courses is overloaded, including 30 contact hours per week.
- The conditions for the financial support allocated for the preparation of the Final Thesis is not transparent enough.
- The funding for promotional scholarships is scarce.
- A large drop-out rate of the students.

6. Programme management

The administrative organisation of the LUHS is adequate to assure the implementation and monitoring of the programme. Appropriate academic and administrative bodies are in place and their responsibilities are clearly defined as much they can be evaluated upon the information provided in the SER and also executed in due manner as the expert team learned during the site visit at Veterinary Academy.

The information on implementation of the programme is regularly collected by means of questionnaires: (1) questionnaires for students to evaluate every subject, (2) questionnaire for graduates to evaluate the whole study programme.

Data from the first questionnaire are automatically summarised and thereafter published on LUHS webpage. The results are analysed by heads of the departments of the Faculty and, if necessary, discussed individually with teachers. Generalised analysis is discussed at Studies Programme Coordination Committee (SPCC) meetings.

The information on the implementation of the programme concentrates on the quality of the running process; it is able to detect irregularities and problems, what is the basis for improvement. The approach to collect information needed for introducing structural changes, modernisation of the programme has to be developed. The representatives of the employers are represented at SPCC, their role in the programme development should be strengthened.

Every student who graduates the faculty answers another questionnaire asking their opinion on quality of the study program, positive and negative aspects of the programme as well as suggestions for improvement of the study program. The collected information is analysed by the SPCC and results of this analysis are presented to the programme teachers. Also SPCC develops recommendations for the improvement of the study programme and/or a particular subject.

Studies Programme Coordination Committee (SPCC) collects data on implementation of the study programme continuously and organises internal analysis every 3-4 years according to the requirements of the Centre for Quality Assessment in Higher Education of Lithuania.

At Faculty level the information on achievement levels of students in different subjects is regularly analysed. The results of the analysis are discussed at the meetings of the Council of the Faculty.

Every year at least one meeting between student's representatives (Veterinary Students Association) and the Faculty administration takes place to gain verbal feedback from students on study programme and studies.

At the University level the Studies Quality Evaluation Commission (SQEC) collects regularly information on the quality of the implementation of the study program. SQEC is responsible for distribution of the questionnaire for evaluation of study subjects and summarizing of data and publication of generalised information at the LUHS website. Additionally, the SQEC organises so called focus groups evaluations (the evaluation of particular lecturers) and evaluation of ethical environment (lecturers–student relations).

It can be concluded, that the collected information is adequate and sufficient to monitor the implementation of the program and assuring the quality of teaching.

The outcomes of internal and external evaluations of the programme have been used for the improvement of the program. However, the general structure of the veterinary study programme follows rather old traditions. For example, the structure of clinical part of the programme is based on organ systems and aetiology of diseases rather than clear focus on clinical medicine of different animal species. The clinical training of students mainly takes place extramurally rather than at the University clinics. The expert team had some concern that the existing system of quality assurance enables the institution to maintain the achieved level of programme performance, but it may need some restructuring through more intense involvement of external and international advisors to generate stimuli for innovation and modernisation.

The internal analysis and improvement of the programme is primarily the responsibility of the Faculty. The Faculty's SPCC includes, besides the teachers, also the students and external members – practitioners. At the LUHS level the responsible bodies are the University Senate and Council. Student representatives are members of the University Senate; employers and social partners are represented at the Council. The expert team would like to encourage the increase of the role of the external members of SPCC in the development and modernization of the programme, adjusting its aims and learning outcomes to the needs of the changing labour market.

The internal quality assurance measures are efficient in monitoring important aspects of the teaching process and study programme. Mechanisms to correct the discrepancies in teaching quality, if discovered, are in place. The quality assurance measures should be directed more

towards the development of the curriculum according to the changing needs of the profession – introduction of new approaches into teaching process and changes in curriculum structure.

Main strengths and weaknesses

Strengths

- Adequate organisational structure to assure the implementation and monitoring of the study programme at the University and Faculty level.
- Clearly defined responsibilities of different academic bodies at the Faculty level.
- Well-functioning study programme committee.
- Regular collection of the feed-back information from the students and graduates.
- Regular self-evaluation of the programme at the Faculty level.

Weaknesses

- Unclear focus of the activities of the Study Quality Evaluation Commission (SQEC) at the University; apart of the organisation of the subject evaluation by the students.
- The quality assurance measures are focused more on monitoring of the present state rather than on the innovation and development of the curriculum.

III. RECOMMENDATIONS

Having regard to the goals of the development of the integrated study programme in Veterinary Medicine at the LUHS towards full international recognition and obtaining accreditation from EAEVE, whose visit is planned at LUHS in 2012, the expert team would like to recommend the Curriculum Committee of the programme and the administration of the Veterinary Academy to consider the following activities:

- 3.1. to elaborate the concepts of the clinical skills and research aptitude of the graduates at defining the learning outcomes of the programme;
- 3.2. to enlarge the clinical part of the curriculum and to consolidate the part of clinical rotation in blocks of at least one week at the time;
- 3.3. to support the internationally competitive research of the staff in order to safeguard the concept of research based training;
- 3.4. to recruit more clinicians in official teaching status within the programme, in key areas – European level specialists should be involved as far as possible;
- 3.5. to provide more transparency at the clinical part of the programme using internationally accepted terminology rather than „infectious“ versus „non-infectious“ diseases;
- 3.6. to upgrade the clinical facilities and equipment, in particular Small Animal Clinics and Large Animal Clinics;
- 3.7. to explore the possibility to increase horizontal and vertical integration among the subjects and to increase the electives in order to develop a certain measure of tracking within the programme;
- 3.8. to reconsider the course plans for the first three study years in order to promote student-centred learning;
- 3.9. to develop more transparent terms of funding for the constituent parts of the programme in particular for the financial support for the practical placements and for the Master Thesis projects;
- 3.10. to develop the study quality assurance system as a tool to foster innovation and development of the study programme according to the changing needs of practicing veterinarians.

IV. GENERAL ASSESSMENT

The study programme *Veterinary medicine* (state code – 601D20001, 60112B101) is given **positive** evaluation.

Study programme assessment in points by fields of assessment.

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Staff	3
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	4
6.	Programme management (programme administration, internal quality assurance)	4
	Total:	20

*1 (unsatisfactory) - there are essential shortcomings that must be eliminated;

2 (satisfactory) - meets the established minimum requirements, needs improvement;

3 (good) - the field develops systematically, has distinctive features;

4 (very good) - the field is exceptionally good.

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