



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

**LIETUVOS VETERINAJOS AKADEMIJOS  
PROGRAMOS  
*VETERINARINĖ MAISTO SAUGA (61210B106)*  
VERTINIMO IŠVADOS**

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**EVALUATION REPORT  
of *VETERINARY FOOD SAFETY (61210B106)*  
STUDY PROGRAMME  
at Lithuanian Veterinary Academy**

Grupės vadovas: Team leader:	Prof. Roza Adany
Grupės nariai: Team members:	Assoc. Prof. Anita Villerusa Ene Indermitte Jonas Bartlingas Tomi-Pekka Tuomainen

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## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Veterinarinė maisto sauga</i>
Valstybinis kodas	61210B103
Studijų sritis	Biomedicinos mokslai
Studijų kryptis	Visuomenės sveikata
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji pakopa
Studijų forma (trukmė metais)	4 (nuolatinės studijos), 6 (ištęstinės studijos)
Studijų programos apimtis kreditais <sup>1</sup>	153
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Visuomenės sveikatos bakalauras
Studijų programos įregistravimo data	2004-02-17

<sup>1</sup> – vienas kreditas laikomas lygiu 40 studento darbo valandų

## INFORMATION ON ASSESSED STUDY PROGRAMME

Name of the study programme	<i>Veterinary Food Safety</i>
State code	61210B106
Study area	Biomedicine
Study field	Public Health Care
Kind of the study programme	University studies
Level of studies	First cycle
Study mode (length in years)	Full-time (4), part-time (6)
Scope of the study programme in national credits <sup>1</sup>	153
Degree and (or) professional qualifications awarded	Bachelor in Public health
Date of registration of the study	2004-02-17

<sup>1</sup> – one credit is equal to 40 hours of student work

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## I. INTRODUCTION

Public health field in Lithuania is defined quite broad, includes professional training for different health related specialities at non-university and university level.

Veterinary doctors and animal husbandry specialists have been trained in the Lithuanian Veterinary Academy (LVA) for more than 70 years. Lithuanian Veterinary Academy is the only higher educational school of this profile in Lithuania. The Academy has two faculties: Veterinary and Animal Husbandry Technology.

In 2004, the Academy started training specialists in veterinary safety. Study programme *Veterinary food safety* (VFS) has been linked to the Veterinary Faculty which delivers training at bachelor and master levels. The VFS prepares specialists in undergraduate level and offers full-time (4 years) and part-time (6 years) studies.

The program was launched in 2004 and no external assessment of the program has been made; till now only 2 classes have graduated the program in full-time studies, while the first class in part-time studies will be graduated in 2012.

The faculty has conducted internal self assessment of the program in 2007 and 2009.

## II. PROGRAMME ANALYSIS

### 1. Programme aims and learning outcomes

#### 1.1. Programme demand, purpose and aims

##### 1.1.1. Uniqueness and rationale of the need for the programme

Food industry is one of the priority industries in Lithuania and there is a need for specialists in this field. The State Food and Veterinary Service indicates that the sector of food industry is growing and about forty food safety specialists are needed yearly in Lithuania. Furthermore, employers expressed their needs of specialists in food safety. Graduates of the bachelor programme have the possibility to study in VFS master programme, and it is frequently chosen, because it is difficult to find job with BSc degree. It is important to make needs assessment on the job market and to develop educational development strategies in harmony with the needs explored.

The popularity of the program can be considered very high as the competition to study places over the 5, recent years has been 1:4.

##### 1.1.2. Conformity of the programme purpose with institutional, state and international directives

The purpose of the programme conforms to the Lithuanian veterinary academy (LVA) mission – preparation of highest qualification VFS specialists and scientists on the level of international standards and development of applied scientific research and experimental works in biomedicine sciences. VFS specialists form a link between plant production, animal husbandry, veterinary medicine, food and public health sciences.

##### 1.1.3. Relevance of the programme aims

Objectives of the VFS study programme conform to the requirements in the “Regulation on Public Health Study Direction for the first cycle university studies. The duration of studies is 4 years (full-time) and 6 years (part-time) and the scope is 153 credits and it confirms to the Regulation.

#### 1.2. Learning outcomes of the programme

##### 1.2.1. Comprehensibility and attainability of the learning outcomes

Objectives of the studies are specified as competences qualifying specialists for valuable work in the field of VFS. The level of the study objectives complies with the qualification requirements described in European and National framework qualifications.

#### *1.2.2. Consistency of the learning outcomes*

Learning outcomes at programme level are harmonized, supplementing each others. Learning outcomes are complying with the EU approach in ensuring public health through the chain of food „from field to table“. Students obtain knowledge and skills in the logical sequence.

#### *1.2.3. Renewal of the learning outcomes*

The review of the learning outcomes is impacted by many factors such as evolving animal and human diseases, calls of international community to take into account interconnection between animal diseases and public health. Rapid changes in food production industry cause higher requirements to the specialists and learning outcomes of the programme should be regularly assessed. Study Programme Committee makes proposals each year to address the changes in the market. Once in three years the Study Programme Committee performs a self-analysis evaluating the subjects in the study programme. Employers have indicated that graduates sometimes lack practical skills. Currently, the managerial knowledge and skills in the study programme are strengthened. Evaluation of learning outcomes is not performed by questioning employers and graduates.

## **2. Curriculum design**

### **2.1. Programme structure**

#### *2.1.1. Sufficiency of the study volume*

Study programme complies with the Regulation (2007) and General Requirements for the study programmes (2005). The programme load is 153 credits (13 credits more than minimal scope for undergraduate studies). The programme is formed of 3 parts: general studies, basic studies and special studies. Subjects of the general education part develop the general university knowledge (10 %). Subjects of the basic studies (39 %) make up the core for professional knowledge and practical skills. Special education subjects are related to professional activity. Specialty studies make 37 % of the program load (under Regulation – not less than 25 %), that includes professional practice. 14 credits are given for free elective subjects (9 %) and 8 credits are given for thesis or qualification examination (5 %). The scope of the programme in credits is the same for both forms of studies.

#### *2.1.2. Consistency of the study subjects*

Study plan of the program is well established, shows the scope, sequence, credits (hours) of compulsory and free elective subjects per semester. The subjects are distributed into semesters considering their relationships. Such succession of study subjects allows students to gradually increase knowledge and skills, starting from the general subjects and finishing with specific subjects. The students gradually acquire necessary knowledge covering the entire food production chain. Students can select from 27 elective subjects for at least 14 credits. Optional subjects provide knowledge broadening the competences of future specialists and stimulate their continuous development. The composition of subjects in the programme is unbalanced: the veterinarian subjects are over-, while the public health subjects are underrepresented.

### **2.2. Programme content**

#### *2.2.1. Compliance of the contents of the studies with legal acts*

The programme has been designed by considering student knowledge and capacities emphasized in the Regulation. The content of the programme conforms to the General Requirements for

study programmes (2005). In the curriculum the public health subjects are poorly represented, while veterinary subjects are over dimensioned.

Students having a final average score over 8.5 can select between writing thesis or absolving a final exam – this practice needs reconsideration, because it seems to be in conflict with the “Regulation of the Study Field of Public Health Care” Article 19.

### *2.2.2. Comprehensiveness and rationality of programme content*

Themes of the study subjects ensure the achievement of the objectives of the programme. Study subjects cover the topics of food safety and quality assurance in the context of public health.

Different forms and methods are used in teaching: basic knowledge is acquired in the class work: lectures, seminars and practical class work. Cognitive capacities are acquired through independent tasks, control works and individual projects. Practical skills are developed in laboratory work and practice. Teamwork and communication skills are developed in workshops. Independent studies are used in studying the literature, writing course and final papers.

The whole curriculum design and the content of study subjects need revision. International comparison can be made regarding naming and the content of subjects. Some of the subject names are description of the content and not internationally known and accepted subject-names. The curriculum needs major revision: topics as epidemiology (especially the epidemiology of food-borne diseases), public health, human patho-physiology (especially immune and endocrine responses to nutrients, food additives, and contaminants), health policy, health management, risk assessment and communication have to be represented. Subject names which cannot find in the international professional dictionary have to be deleted (for example ‘valeology’). The practical part of the training has to be strengthened.

## **3. Staff**

### **3.1. Staff composition and turnover**

#### *3.1.1. Rationality of the staff composition*

The staff of the VFS study programme consists of teachers of high qualification and scientific degrees, and pedagogical experience. In the programme 69 full-time teachers and 11 part time teachers are involved. The representation of teachers with scientific degree is 78.3%. The proportion between the teachers and students is optimal. 431 students study in full-time and part-time studies. 7 teachers have been invited from foreign universities in the framework of the project under ERASMUS programme. The full-time load of teachers in a school year is 1447 hours. Contact hours comprise 35 % of the teacher’s total work load in average. Most of the teachers are also involved in other study programmes.

As the veterinary subjects prevail over all other types of subjects in the curriculum the veterinary teachers - who are veterinary surgeons and zooengineers – also dominate in the staff, the public health teachers (as the subjects) are almost completely missing.

#### *3.1.2. Turnover of teachers*

Average age of teachers is 46.3 years. Teachers up to 55 years of age make 72 %. The program is trying to exploit „own“ teachers and scientists. External change of teachers is insignificant and natural, with main reasons like retirement age, end of the labour contract. Majority of the teachers working in the programme are in the most productive age for making science.

### **3.2. Staff competence**

#### *3.2.1. Compliance of staff experience with the study programme*

There has been a remarkable improvement in teachers’ qualification in the period of 2004-2008: 11 programme teachers acquired PhD degrees, professorships have been conferred to 8 teachers, pedagogical titles of associated professors (docents) – to 8 teachers and 8 teachers of the

programme have got PhD degree. In 2008 and 2009 the programme was involving 16 professors, 30 associated professors (docents), 32 lecturers and 4 assistants. Teachers have sufficient experience of pedagogical work. The average of the teachers' teaching experience is 12 years. Teachers are regularly updating methodological and learning materials. In 2004-2009, teachers of the programme issued 4 textbooks, 20 schoolbooks, 54 methodological and other teaching aids. Teachers are also active in science, in the last five years 732 research articles were published in international journals. Teachers are also involved in EU research and development programmes (FP6, FP7, COST).

### *3.2.2. Consistency of teachers' professional development*

Over the period of 2004-2009, teachers of the programme collaborated with Danish, German, Swedish, Polish and Finish institutions, 31 teachers improved their knowledge in foreign universities.

## **4. Facilities and learning resources**

### **4.1. Facilities**

#### *4.1.1. Sufficiency and suitability of premises for studies*

There are sufficient amount of premises for the execution of the study program. Laboratories for training (48) and teaching rooms (32) contain well equipped individual work places with laboratory equipment. By 2009, 4 computer classes have been equipped and a Distance and Electronic Studies Centre and a training classroom (24 seats) have been established in the Academy. The library was renovated in 2008. In total the library offers 86 work places. A library programme ALEPH enables to get access to international scientific literature and learning materials. A wireless internet is available in the library.

#### *4.1.2. Suitability and sufficiency of equipment for studies*

In the recent five years, nearly all the departments updated their equipment which is used to implement VFS study programme. Students of the study programme have a proper material base in order to carry out laboratory and practical work. Needs for the equipment and tools are analysed each year while distinguishing priority or most topical areas in order to upgrade their material base. Sufficient amount of funds is allocated each year for the laboratories

#### *4.1.3. Suitability and accessibility of the resources for practical training*

Practical training is an important part of the curriculum. There is an opportunity of selecting the place of practise from the list of enterprises provided by the manager of the Career Centre or the students may themselves propose enterprises. There are enough practical sites available for the students. LVA has signed contracts with enterprises and the students work is monitored. Students can collect information for their final work during their practice.

### **4.2. Learning resources**

#### *4.2.1. Suitability and accessibility of books, textbooks and periodical publications*

During the recent years, the library fund was considerably enriched with new documents projected towards the programme for developing VFS specialists. In 2009 implementation of a project „eMoDB.LT: opening of electronic scientific research data bases for Lithuania“ provided a broader access to required data bases, including „Science Direct“. Access to electronic databases is possible through library.

There is a lack of books, periodicals in the field of public health and the development of the library has essential importance. The present collection of student handbooks should be changed for internationally recognized items.

#### *4.2.2. Suitability and accessibility of learning materials*

There is a list of main text books used for teaching in the study programme. Over the assessed period, 43 methodical measures have been prepared for the basics and speciality studies.

### **5. Study process and student assessment**

#### **5.1. Student admission**

##### *5.1.1. Rationality of requirements for admission to the studies*

Admission of students is done in accordance with general provisions of the rules for general admission to undergraduate/first cycle studies at Lithuanian higher education schools.

Competitive disciplines are: biology, chemistry, Lithuanian language – mature examinations and a foreign language (English, French, Russian, German) – a yearly grade. Minimal requirements to state-funded and self-paid studies are the same. Programme is very popular among school-leavers: the ratio between the adopted students and those wishing to study during the recent 5 years is 1:4. The passing competition score in 2009 for state-financed places is an average of 16.8.

##### *5.1.2. Efficiency of enhancing the motivation of applicants and new students*

LVA marketing activity is improved by organizing vocational information and guiding events (over 5 years) such as: career days, open door days, fairs of studies, meetings with students of senior classes at LVA, teachers' visits to schools.

Student motivation is strengthened on introductory lectures on the speciality. Students are familiarized with the plan of studies. Students are motivated during career days and meetings with employers. Students have a possibility to study in foreign universities under ERASMUS exchange and other programmes. Successful students are granted state-paid positions and scholarships. Strong graduates are recommended to the employers.

#### **5.2. Study process**

##### *5.2.1. Rationality of the programme schedule*

The work load per week and semester is distributed rationally for students. Timetables are made available at the beginning of semester. Students have enough time to carry out tasks of independent work. Duration of studies for a student does not exceed 6 academic hours a day and 30 hours a week. All training blocks are situated on the territory of the Academy in rooms close to each other. The exam period lasts 3 weeks. Minimum 2-3 days are given to prepare for the examination.

##### *5.2.2. Student academic performance*

System for monitoring development of students includes attendance of students, summary of the results of their intermediate and final clearings. During the last 2 years 69-78 % of students graduated with nominal time. The percentage of dropouts in this programme is not large. If it happens the main reasons are: academic leave or repeating the course. In order to reduce the losses, students are motivated by consultations.

##### *5.2.3. Mobility of teachers and students*

The rate of mobility is becoming steady in the last years and that shows that teacher demand for going abroad with teaching visits is satisfied. The impact to the study program can be seen through the good practice and cooperation with foreign universities.

In student mobility 2.4% of students is involved in a study program. There are ERASMUS agreements signed with 15 universities and BOVA academic network inside Baltic States and to Nordic countries for intensive international courses and student exchanges. All available financial resources for mobility are utilized; there is a lack of them in order to satisfy all demand.



The veterinary food safety program is unique in Europe and so the student mobility is not adequate and can be done only by separate subject or practise.

### **5.3. Student support**

#### *5.3.1. Usefulness of academic support*

There are various ways to support students: introductory lectures, deanery meetings, academy web site, etc. All students have a possibility to consult programme teachers, part of the consultations is provided by email.

#### *5.3.2. Efficiency of social support*

There are modern sports facilities in the Academy where students can attend training sessions of elective subjects or enjoy sport activities in their free time. Students also participate in the cultural life of the Academy, attend a choir „Juventus“, national dance group „Džigūnas“ and a folklore group „Kupolė“.

The Academy has 4 student hostels which can accommodate 650 students. Every request to live in a hostel is satisfied in accordance with the prescribed procedure.

### **5.4. Student achievement assessment**

#### *5.4.1. Suitability of assessment criteria and their publicity*

Criteria for assessing study results are adequate for the objectives, aims and content of the study programme. Different assessment methods are used depending on learning outcomes.

Teachers introduce students to the criteria for achievement assessment, forms of intermediate clearings. The procedures have been placed on LVA internet web site and are always easily accessible to students.

#### *5.4.2. Feedback efficiency*

The opinion of students on training is not monitored on a regular basis; consequently the feedback system is also missing.

#### *5.4.3. Efficiency of final thesis assessment*

The final work may be chosen by students whose average score of the five semesters is not less than 8.5. Themes of the final works are proposed by the teachers of the VFS programme subjects. The final work must be connected to public health and contain elements of scientific research work. There is an official procedure for the preparation, defence and assessment of the final works in the Veterinary Food Safety. Final works are assessed by the reviewers and final works' defence commission. The possibility to write also final thesis should be offered to all students.

#### *5.4.4. Functionality of the system for assessment and recognition of achievements acquired in non-formal and self-education*

The student knowledge acquired in informal way is assessed and recognized: students are encouraged to make scientific presentations in students' conferences and to prepare scientific publications; but this issue is not popular and should be strengthen.

### **5.5. Graduates placement**

#### *5.5.1. Expediency of graduate placement*

The first graduates completed the studies in 2008. Majority of the graduates (88.6%) continued their studies for the master's degree. There was a survey of graduates made in 2009 but there are still too few graduates to make any conclusions. The graduates qualified their professional preparation as good. Unfortunately, the start of the professional career of the VFS bachelors coincided with the onset of economic crisis in the country which undoubtedly

aggravated integration of the graduates in the labour market. A regular system for monitoring graduates should be implemented and the creation of an association of alumni would be a positive development; so it should be encouraged.

## **6. Programme management**

### **6.1. Programme administration**

#### *6.1.1. Efficiency of the programme management activities*

VFS study programme is managed through 2 functional bodies: program coordinator and study program committee. The members of the Committee include: representatives of the faculty, coordinator of the program, students and employers or state officials.

The functions and tasks of Committee members have been clearly stated. Committee work is managed by the co-ordinator of the study programme. Committee no less than once per semester conducts meetings convened and chaired by the Committee chairman. Representatives of the faculty are responsible for provision of information on the deficiencies of the study programme, regular and current evaluation of the study programme and proposals to improve the study programme, as well as the evaluation of the subjects taught. Students included in the Committee are responsible for provision of student opinion and comments on the study programme. The employers are responsible for provision of external information on the programme to the members of the study program committee; provision of comments and proposals to improve the implementation and quality of the studies taking into account experience and opinion of social partners.

Committee' proposals are later analysed by the Studies Commission which is a collective body approved by the Senate. The data connected to the implementation of the programme is being accumulated since the beginning of the programme. The collected data are analysed and used to improve the programme, also forecasts for the prospects of the programme are drawn.

### **6.2. Internal quality assurance**

Frequent reviewing of programme content is needed because the study program is unique and still new; and the science of food production and safety is undergoing constant changes. An extensive self-analysis of the VFS study programme is carried out once in three years in accordance with study program committee regulations.

#### *6.2.1. Suitability of the programme quality evaluation*

All stakeholders are actively involved in evaluation processes and they initiated many principal changes in the curriculum regarding content and volume of study subjects.

#### *6.2.2. Efficiency of the programme quality improvement*

At the end of each school year, the course of studies is evaluated at the Faculty Council and Studies Commission. Decisions for improvements are implemented through the preparation of the program plan, timetables and module descriptions for the coming school year.

#### *6.2.3. Efficiency of stakeholders' participation.*

An employer participating in the SPC activity analyses the programme and problems faced by the graduates starting their professional career and submits their proposals to eliminate shortcomings. A schedule of meetings with the employers should be developed and implemented.

### III. RECOMMENDATIONS

Committee members support full accreditation of the program.

1. The practice that students having a final average score 8.5 and over may decide between writing thesis or absolving a final exam needs reconsideration, because it seems to be in conflict with “Regulation of the Study Field of Public Health Care” Article 19.

2. The whole curriculum design and the content of study subjects need revision. International comparison can be made regarding naming and the content of subjects. Some of the subject names are short description of the content and not internationally known and accepted subject-names.

3. The composition of the course is unbalanced: the veterinarian subjects are over-, while the public health and human physiology subjects are underrepresented (it is reflected by the students’ opinion). The unification of Kaunas Medical University and the Veterinary Academy gives unique opportunity to restructure and rationalize the program.

4. The curriculum needs major revision: topics as epidemiology (especially the epidemiology of food-borne diseases), public health, human patho-physiology (especially immune and endocrine responses to nutrients, food additive, and contaminants), health policy, health management, risk assessment and communication have to be represented.

5. Subjects which cannot find in the international professional dictionary have to be deleted (for example ‘valeology’).

6. The practical part of the training has to be strengthened.

7. The opinion of students on training is not monitored; consequently the feedback system is missing. The monitoring and feed back systems have to be developed and implemented.

8. It is important

- to collect information on the bachelors (monitoring the former students’ carriers)

- to make needs assessment on the job market and developing strategies in harmony with the needs explored

9. The development of the library is essential; both the collection of books / periodicals and library services have to be strongly improved. The present collections of student handbooks should be changed for internationally recognized items.

### IV. GENERAL ASSESSMENT

The study programme *Veterinary Food Safety* (state code – 61210B106) is given **positive** *assessment in points by evaluation areas.*

No.	Evaluation area	Assessment in points
1	Programme aims and learning outcomes	2
2	Curriculum design	2
3	Staff	3
4	Facilities and learning resources	3
5	Study process and student assessment (student admission, student support, student achievement assessment)	2
6	Programme management (programme administration, internal quality assurance)	3
	<b>Total:</b>	15