



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Vytauto Didžiojo universiteto  
**STUDIJŲ PROGRAMOS *BIOLOGIJA***  
(*valstybinis kodas – 612C10003*)  
**VERTINIMO IŠVADOS**

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**EVALUATION REPORT of**  
***BIOLOGY STUDY PROGRAMME***  
(*state code – 612C10003*)  
**at Vytautas Magnus university**

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3. **Prof. dr. Jacques van Alphen,** *academic,*
4. **Dr. Ramunė Leipuvienė,** *representative of social partners',*
5. **Vaida Šidlauskaitė,** *students' representative.*

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Išvados parengtos anglų kalba  
Report language – English

## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<b>Biologija</b>
Valstybinis kodas	612C10003
Studijų sritis	Biomedicinos mokslai
Studijų kryptis	Biologija
Studijų programos rūšis	Universitetinės studijos
Studijų pakopa	Pirmoji
Studijų forma (trukmė metais)	nuolatinė (4)
Studijų programos apimtis kreditais	240
Suteikiamas laipsnis ir (ar) profesinė kvalifikacija	Biologijos bakalauras
Studijų programos įregistravimo data	2009-08-31

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## INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<b>Biology</b>
State code	612C10003
Study area	Biomedical Sciences
Study field	Biology
Type of the study programme	University studies
Study cycle	First
Study mode (length in years)	Full-time (4)
Volume of the study programme in credits	240
Degree and (or) professional qualifications awarded	Bachelor in Biology
Date of registration of the study programme	31-08-2009

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## **I. INTRODUCTION**

### ***1.1. Background of the evaluation process***

The evaluation of on-going study programmes is based on the **Methodology for evaluation of Higher Education study programmes**, approved by Order No 1-01-162 of 20 December 2010 of the Director of the Centre for Quality Assessment in Higher Education (hereafter – SKVC).

The evaluation is intended to help higher education institutions to constantly improve their study programmes and to inform the public about the quality of studies.

The evaluation process consists of the main following stages: *1) self-evaluation and self-evaluation report prepared by Higher Education Institution (hereafter – HEI); 2) visit of the review team at the higher education institution; 3) production of the evaluation report by the review team and its publication; 4) follow-up activities.*

On the basis of external evaluation report of the study programme SKVC takes a decision to accredit study programme either for 6 years or for 3 years. If the programme evaluation is negative such a programme is not accredited.

The programme is **accredited for 6 years** if all evaluation areas are evaluated as “very good” (4 points) or “good” (3 points).

The programme is **accredited for 3 years** if none of the areas was evaluated as “unsatisfactory” (1 point) and at least one evaluation area was evaluated as “satisfactory” (2 points).

The programme is **not accredited** if at least one of evaluation areas was evaluated as “unsatisfactory” (1 point).

### ***1.2. General***

The Application documentation submitted by the HEI follows the outline recommended by the SKVC.

### ***1.3. Background of the HEI/Faculty/Study field/ Additional information***

The Biology Study Programme at Vytautas Magnus University was started in 1990, certified by Centre for Quality Assessment in Higher Education in 2009 and evaluated in 2013; the latter evaluation resulted in 3-years accreditation. The main recommendations from the prior evaluation considered the improvement of the aims and learning outcomes of the programme, learning outcomes of the subjects and curricula design, and internal quality assurance system.

#### **1.4. The Review Team**

The review team was completed according *Description of experts' recruitment*, approved by order No. 1-01-151 of Acting Director of the Centre for Quality Assessment in Higher Education. The Review Visit to HEI was conducted by the team on 18<sup>th</sup> October 2016.

- 1. Prof. dr. Aleksandar Jovanovic (team leader)**, *Vice-rector for International relations, Professor of Faculty of Medicine, University of Pristina/K.MITROVICA, Serbia.*
- 2. Prof dr. Judit Padisák**, *Director of Institute of Environmental Sciences, University of Pannonia, Hungary.*
- 3. Prof. dr. Jacques van Alphen**, *Professor Emeritus at the Institute for Biodiversity and Ecosystem Dynamics, University of Amsterdam and the Netherlands Centre for Biodiversity, Netherlands.*
- 4. Dr. Ramunė Leipuvienė**, *Product Manager at UAB Thermo Fisher Scientific, Lithuania.*
- 5. Vaida Šidlauskaitė**, *Doctoral student at Lithuanian Sports University (Biology field), Lithuania.*

## **II. PROGRAMME ANALYSIS**

### **2.1. Programme aims and learning outcomes**

The name of the Programme and the aims are compatible with General Requirements for First Degree and Integrated Study Programmes and strategic documents of Vytautas Magnus University and the Faculty of Natural Sciences. The aim of the programme (SER, p. 6) is to train the qualified specialists with research skills who can successfully work in research and practice of science, technology, business and social areas or systems emphasizes only specialization in biology and research skills. The purpose, (SER, p. 7) – or the wider aim – is *„to prepare competitive, qualified biology professionals with the knowledge and skills of classic and modern chemistry, physics, biochemistry and other basic sciences as well as applied biology subjects (bioinformatics, plant, animal, pharmaceutical, and molecular biology, biotechnology), which are required for application of biology in the practical and professional activities, in creating new products and technologies, starting their own business or for pursuing further studies”*. Thus, the aim is in accordance with the EQF level 6 descriptors (e.g. Advanced knowledge of a field of work or study, involving a critical understanding of theories and principles; advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study; manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts; take responsibility for managing professional

development of individuals and groups) and therefore appropriate for the Bachelor study programme in Biology. The name, the aim and the learning outcomes (LOs) of the Programme are in accordance with the legal requirements.

LOs are well defined and clear, in accordance with level 6 LQF and EQF and with Bloom Taxonomy. They comprise the advanced knowledge, skills and competencies from the cognitive, psychomotor and cognitive domains, adequate for the level of studies. The LOs of some individual subjects (e.g. Environmental Chemistry, Biodiversity Conservation, Physical and Colloidal Chemistry etc.) could be additionally harmonized with the Programme's LOs and include more different abilities from the cognitive, psychomotor and affective domains. During the visit, the evaluation panel has obtained information that the adequate skills and competencies are already achievable in the learning practice and that the learning and assessment methodologies are adequate, although some LOs, at least for some subjects, were not formulated and written in the optimal way in the SER.

The aim and the LOs are based on the research of the labor market demands and requirements for the specialists in biology, molecular biology and biotechnological industry and other spheres of molecular biosciences as well as the good practice examples from the universities of Zurich University of Applied Sciences (Switzerland), Yale University (U.S.A.), Columbia University (U.S.A.), Jacobs University (Germany) and other EU universities. As well, the aim and the LOs are based on the important EU documents – The 2002 European Commission “Life sciences and biotechnology – a strategy for Europe, the Europe 2020 Strategy, “2025 World Challenges” report and the Innovation Union Flagship Programme. In 2013, the Lithuanian Government approved Health Technologies and Biosciences as one of the six priorities in Research and Experimental Development and Innovations.

The LOs are assessed and updated every year by the Study Programme Committee and are evaluated against the labor market needs and economic situation and migration processes (SER, p. 10). The discussions, amendments and the alignment are done with the active participation of the teachers, students, social partners and the management bodies of the Programme. The LOs are publicly accessible via internet and intranet.

## ***2.2. Curriculum design***

The content, volume and structure of the Programme correspond to the level of studies as defined by the General Requirements for First Degree and Integrated Study Programmes in the Order of the Minister of Education and Science No. V-501 of April 9th, 2010.

More than minimal number of ECTS credits were appointed to general subjects (40 ECTS credits vs minimal 15 defined by the General Requirements for First Degree and Integrated Study Programmes and the Descriptor of the Study Field in Biology), study field subjects (200 ECTS vs minimal 165), and the preparation of final thesis (15 ECTS credits vs minimal 12). The students' workload does not exceed 7 subjects per semester. The themes of the study subjects are not repetitive. The volume of each study subject is 30 or 45 lecture hours per semester (2 or 3 hours per week), with 15-30 hours (depending of the study subject) dedicated to practical works and seminar or laboratory works (1.5–3 hours per week, 5–10 weeks per semester). Therefore, the scope of the Programme is rather wide and, based on the interviews obtained during the site visit; the evaluation panel has concluded that the students appreciate this fact when choosing their studies. Students can choose from the pool of the elective subjects (SER p. 11) which are not confined to the Programme only, but also from the other study programs and even from other universities, in order to better prepare themselves for the labor market and future research careers. The students favor this opportunity for self-organization of the studies by freely picking the subject they find useful for the future studies. They would like to have even more liberty and flexibility in the choice of elective courses.

The learning methodology is diverse and adequate in achieving the aim and the LOs: brainstorming, project method, cooperative learning, interpersonal exchange, learning-by-doing, experiential learning, debate, etc. Skills and competences are developed in laboratory work sessions, seminars, by accomplishing individual and group tasks and research projects; presenting the written assignments and presentations prepared according to the indications of the teacher and/or specialized references selected by students; analysis of their practical cases using a group supervision method. However, the LOs of the subjects may be better aligned with the learning and assessment methodology in the sense that each LO has its specific learning and assessment methodology, so they may be measurable.

It can be concluded from the SER p. 25 that the ECTS points were calculated solely based on contact hours. This way of calculating ECTS always leads to overload of both teachers, and students. The Programme may benefit from the use of students survey estimating what is the actual amount of time necessary for the preparation of the subject exams and distribute ECTS points accordingly.

Study subjects' contents as well as the assessment methodology and the subjects LOs are publicly available and well explained and discussed with the students.

The staff of the Programme made the efforts to integrate research with the educational activities. Research skills and competences are developed in laboratory work sessions, seminars, by

accomplishing individual and group tasks and research projects. Students present their written assignments and presentations prepared according to the teacher indicated and/or student selected specialized references; analyze their practical cases using group supervision method. In addition, VMU Academic Youth Scientific Society “Modusas”, connects students from different study programmes in FNS for various activities: science propagation, promotion of natural sciences in schools, organization of conferences, promotion of collaboration of young researchers, etc. However, as discussed in the chapter 2.3 of this report, the scientific publications of the staff may be further improved.

### ***2.3. Teaching staff***

The number, qualifications and the turnover of the staff are sufficient for providing the Programme. The qualification of the staff corresponds to the requirements of the General Requirements For Degree Providing First Cycle And Integrated Study Programmes. The Programme’s staff include full time professors, associate professors and lecturers (SER, p. 14). A total of 61 teachers are engaged which is enough for the provision of the Programme. The teachers’ workload is 36 hours per week, and the vast minority includes research, research planning and publishing. The evaluation panel suggest that the teaching hours should be reduced in favour of research time. The Faculty/University budget provides some financial stimulation, and some non-financial stimulation also exists for doing research.

The turnover of the teachers is adequate (8 new teachers are employed, 3 teachers left). Teachers are involved in different forms of international cooperation: participation in joint international projects, research work activities, teaching and/or research, inter-university exchange. The teachers have the possibility to take part in Erasmus exchange. The incoming mobility is not increasing, however, due to the financial limitations in VMU: the evaluation panel learned during the site-visit that VMU does not have sufficient funds to invite and completely finance the activities and stay of teachers/researchers coming from abroad.

The institution supports teachers’ participation in the national and international research projects, pedagogical training programmes (e.g. the trainings for VMU teachers’ professional development, financed by EUF, “Implementation of problem-based teaching in the university study programs”) and language trainings. Financial and non-financial support and rewards are provided for the scientific publication, participation at conferences, membership in the international and national research organizations and associations, and Erasmus mobility.

The research competences of teachers are in accordance with the VMU Minimal requirements for different positions of the teaching staff based on the Decision of the VMU Senate

(No. 2-3, March 27, 2013) and the General Requirements For Degree Providing First Cycle And Integrated Study Programmes – in the last period of 2013–2016 the teachers had participated in over 10 international projects and 20 projects supported by Lithuanian foundations as well as industrial partners. The teachers published over 50 papers which are included in the Thomson Reuters Web of Knowledge Master Journal list and over 100 papers in other peer-reviewed journals, made over 100 conference presentations at international and national events. Still, the international publishing productivity in Thomson-Reuters journals (ISI/WoS journals) should be improved, especially in the view of the pending and constantly increasing requirements for the teaching positions at the University.

During the visit, students generally expressed a very positive opinion about the teachers of the Programme.

#### ***2.4. Facilities and learning resources***

Faculty of Natural Sciences contains 10 classrooms with more than 450 places, 10 computer laboratories with more than 150 places and the library with more than 60 places. Additional premises may be engaged using VMU classrooms for general subjects, specialized laboratories and research laboratories which are provided by the companies cooperating with the University.

Material resources have improved a lot since the last evaluation. All the laboratories and classrooms are well-equipped now; the detailed list of equipment is provided in the SER (p. 18-19). During the visit to the laboratories used by the practical and research trainings, the evaluation panel found that the equipment is of high quality.

The IT equipment and software is also relatively new and provides very good accessibility and learning opportunities. E-learning and blended learning is developing, improving the accessibility to study materials.

There is no comprehensive Learning Management System which would unify all the delivery, assessment, information and monitoring functions.

Both central and local libraries are well equipped, have adequate number of space, internet accessibility and links with international and national databases, provision of e-books and journals, and a modern management system.

Arrangements for student practices are adequate. Students can do research in seven FNS clusters, Forest research Institute, Botanical Garden, Institute of Horticulture, companies "Thermo Fisher Scientific", "Biocentras", "Amilina" and other ones (SER, p. 25).

According to the students, there is not enough material (animals) for dissections, and they ask for more laboratory practice. Also, the accessibility of the Faculty building for students who

live remotely is somewhat limited since there are not enough places in the dormitories, and the students must rent apartments in town. The Programme management should discuss this with the University management since this may be a way to increase the number of students interested in the Programme.

### ***2.5. Study process-s and students' performance assessment***

The study process is primarily regulated by the General Requirements for Degree Providing First Cycle and Integrated Study Programmes. Admission to the studies are organized upon the admission recommendations of the legal acts and the admission rules of the VMU; generally, the admission is based on the highest marks during the prior education, both for state-financed and for self-financed students. The admission criteria are publicly available. However, the number of students admitted to the study programme is constantly decreasing (in 2016 there were only 18 applicants to the programme), consequently reducing the total number of students in the Programme from 131 in 2013 to 71 in 2015, mostly on the account of state-funded students. The reason, apart from the national demography, is unclear.

The University developed a LLL system for recognition and evaluation of non-formal and informal learning and transfer of the competencies in the study subjects (SER, p. 29). The criteria are publicly available as well.

Students are able to make individual study plans and chose elective subjects via the University intranet system at the beginning of each semester. The timetable and contents of the subjects are publicly available via Moodle and Intranet.

The evaluation panel found that students' attendance during the lectures is rather low. Students should be encouraged to attend the classes, otherwise they may be missing important information.

The assessment comprises summative and formative methodologies: the students may try 5-7 exams / practice reports / practice work presentations in one exam session period lasting up to 23 days. There are also mid-term exams, and the achievements during the school year are also considered and contribute to the final mark. The assessment methodology may be further improved in order to focus equally on knowledge, skills and general competencies and not primarily on knowledge.

The preparation of the bachelor thesis is well conceptualized, beginning with the term papers and starting with the research activities in 5/6<sup>th</sup> semester, while linking the practices with the topics of the bachelor thesis research, and aiming at providing the students with research and presentation skills. However, the evaluation panel found that the quality of bachelor theses varies.

All theses should have a chapter named discussion which compares the obtained results with the results in other significant studies published worldwide and the conclusions must logically follow from the discussion chapter.

Students can publish their research papers at annual conferences but seldom do so, mostly because of the lack of finance required for the participation fees. The institution encourages students to take part in the research activities by two mechanisms: the student's research and publication activities are integrated in the final mark; research and publications of students are also taken into account when they apply for master programmes.

The participation in outgoing student mobility is satisfactory; there are encouraging results in attracting foreign students to the study programme. The mobility results are not sufficient yet, but the development is promising. Although the mobility is generally improving, students experience a language barrier and some do not use Erasmus, because they think their English is not good enough. In some countries, knowledge of the native language is needed, and English is not enough for attending lectures.

Considerable care and planning are directed towards the students with special needs. The University established the Youth Career Center organizing career counseling, career fairs, contacting social partners etc. The Center is well functioning; although the feedback from alumni shows room for improvement.

According to the interviews with alumni and social partners, the students fulfil the professional expectations and have sufficient competencies for the work in respective companies and institutions.

## ***2.6. Programme management***

According to VMU studies regulation and VMU policy, the duty of the implementation, monitoring and quality improvement of the Programme is shared among the Study Programme Committee, Head of the Programme, Department of Biology, and Faculty of Natural Sciences Board. The process is clearly regulated by several VMU publicly available documents.

The Programme is assessed once a year, starting with the analysis of the self-assessment documents and the suggestions coming from the social partners and students. Major updates of the Programme are made by the Committee and the Department of Biology. The improvements and updates are made upon the discussion and evaluation of the LOs, learning methodologies and surveys. The updates and improvements are made at the individual level as well as for the whole Programme. Additional less formal mechanisms for quality improvement, such as forums of teachers, alumni and social partners and a constant feedback from the social partners are in place.

The evaluation panel is convinced that the internal quality assurance measures are well established, though the activity of students varies. While the student's achievements are monitored and discussed, the management may pay more attention to the attainment of LOs based on the exam/testing achievements.

It should be noted that the evaluation process also involve the Faculty Board, the Dean, teachers, students and social partners and that the responsibilities are clearly allocated. However, the contact and communications with alumni may be improved by the establishing a mechanism for regular information exchange between the University/Faculty and alumni. In most higher education institutions Student Support Center usually do the correspondence with the alumni, but the management of the University/Faculty may also put the responsibility for this task on some other formal bodies or individuals.

The management should consider measures to make programme more attractive and interesting in the market.

The Programme management took measures (including the University and Faculty level regulations and financial incentives) to improve the research output of teachers, enhance research collaboration and promote the students' research. Students-researchers receive scholarships and other benefits (academic points or better access to master programs). Still, the Faculty management should increase staff's time available for doing research and reduce the number of teaching hours. In particular, younger teachers-assistants and lectures should be given more time for research, as it is the most creative period of their careers. Earlier, teachers could opt for 50% of working hours for teaching and 50% for research, but this option was removed several years ago.

Students participate in internal quality assurance through surveys, forums of students, teachers, alumni and social partners and through the student representatives in Study Programme Committee, and by the direct individual contacts and discussions with teachers. The students' surveys regarding the Teaching Quality Assessment are done once per year. The Express Questioning System is applied, and the questionnaire focuses on the main areas of study quality, such as teaching/learning, ethics, study materials, methodology/didactics, student satisfaction with studies, novelty, evaluation objectivity, teacher competence, communication. The Programme could additionally benefit from the anonymous questionnaires delivered to the students at the end of lectures/practices; by filling these, they could directly point out the areas for improvement. This would improve the individual participation of students in the quality assessment.

As is pointed above (part 2.5 of this report), the mechanisms for recognition of prior learning are in place. Also, the management established mechanisms and procedures to improve the accessibility for the students with special needs.

## **2.7. Examples of excellence \***

*Self-organization of the studies:* Students can choose from the pool of the elective subjects which are not confined to the study programme only, but also from the other study programmes and even from other universities. They can even choose minor studies and create their own study programme in order to better prepare themselves for the labor market and future research careers.

### **III. RECOMMENDATIONS**

1. The subjects learning outcomes need some improvement. They should focus more on skills and general competences, not predominantly on knowledge.
2. ECT system should take into account the real time needed for the preparation of the subject exam, not only the contact hours. It should be based on questionnaires and interviews with the students who are preparing/passing the exam.
3. The scientific productivity in leading international journals (Web of Science journals) should be increased.
4. Theses must be formulated so that they contain a clear question or hypothesis, a discussion chapter and a conclusions part in which students show their ability for critical thinking, comparison and evaluation of the results and the logical path from results to conclusions.
5. The Learning Management System – Moodle should be further used to develop e-learning and hybrid learning, thus increasing the accessibility to the study materials.
6. Students that do not attend the lectures are missing important information. Hence, students should be encouraged to attend in lectures more often.
7. Materials for practical and laboratory works and dissections (animals) should be provided in optimal amounts and the classes dedicated to laboratory courses should be increased.
8. The load of contact hours of teachers is very high. The management should find a way to reduce the number of contact hours and allow more time for research.
9. Younger teachers-assistants and lectures should be given more time for research in the most creative period of their careers.
10. The collection of feedback from alumni should be improved.
11. Students, who do not use Erasmus because of language barrier (especially in term I and Term II), should be encouraged.

#### **IV. SUMMARY**

The name of the Programme, the aim and the learning outcomes are compatible with the legal requirements and the EQF and LQF level 6 descriptors. Learning outcomes are well defined and clear; they are publicly available. The learning outcomes are assessed and updated every year.

The content of the Programme, the volume and structure corresponds to the level of studies as defined by the requirements for undergraduate programmes. The scope of the Programme is rather wide. Students can choose from the wide pool of the elective subjects in order to better prepare themselves for the labor market and future research careers. The learning methodology is diverse and adequate; however, the learning outcomes of the subjects may be better defined.

ECTS points were calculated solely based on contact hours. The Programme may benefit from establishing the actual amount of time necessary for the preparation of the subject exams and distribute ECTS points accordingly.

Study subjects' content are publicly available. The assessment methodology is diverse, but it should be more focused on skills and thinking, not predominantly on knowledge and learned facts.

Even though the preparation of the bachelor thesis is well conceptualized, the quality of bachelor theses varies greatly and should be harmonized.

The number, qualifications and the turnover of the staff are sufficient for providing the study programme. The institution supports the research activities and the participation of the staff in the mobility programs. The study programme staff made the efforts to integrate research with the educational activities. However, the scientific publications and mobility of the staff may be further improved.

All the laboratories, classrooms and library are well-equipped. The IT equipment and software is new and provides very good accessibility and learning opportunities. E-learning and blended learning are developing. Arrangements for student practices are adequate.

Admission to the studies is organized upon the legal requirements. The University developed a LLL system for recognition and evaluation of non-formal and informal learning. The institution encourages students to take part in the research activities. However, students should be encouraged to attend classes.

The participation in outgoing student mobility is satisfactory; there are also encouraging results in attracting foreign students to the study programme. Considerable care and planning are directed towards the students with special needs. Youth Career Center is active. The students fulfil the professional expectations and have sufficient competencies for the work in respective companies and institutions.

The system of Quality assurance shows evident improvement. The process of quality management is clearly regulated and implemented accordingly. Students and social partners take part in the implementation of the quality assurance mechanisms along with the staff. The participation of the alumni in the quality assurance process may be further improved. The management should consider measures to make programme more attractive and interesting. It should also consider the possibilities to increase staff's time available for research and reduce the number of teaching hours.

## V. GENERAL ASSESSMENT

The study programme **Biology** (state code – 612C10003) Vytautas Magnus University is given **positive** evaluation.

*Study programme assessment in points by evaluation areas.*

No.	Evaluation Area	Evaluation of an area in points*
1.	Programme aims and learning outcomes	3
2.	Curriculum design	3
3.	Teaching staff	3
4.	Facilities and learning resources	3
5.	Study process and students' performance assessment	3
6.	Programme management	3
	<b>Total:</b>	<b>18</b>

\*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.

Grupės vadovas:

Team leader:

**Prof. dr. Aleksandar Jovanovic**

Grupės nariai:

Team members:

**Prof. dr. Judit Padisák**

**Prof. dr. Jacques van Alphen**

**Ramunė Leipuvienė**

**Vaida Šidlauskaitė**

**VYTAUTO DIDŽIOJO UNIVERSITETO PIRMOSIOS PAKOPOS STUDIJŲ  
PROGRAMOS *BIOLOGIJA* (VALSTYBINIS KODAS – 612C10003) 2017-02-09  
EKSPERTINIO VERTINIMO IŠVADŲ NR. SV4-42 IŠRAŠAS**

&lt;...&gt;

**V. APIBENDRINAMASIS ĮVERTINIMAS**

Vytauto Didžiojo universiteto studijų programa *Biologija* (valstybinis kodas – 612C10003) vertinama **teigiamai**.

<b>Eil. Nr.</b>	<b>Vertinimo sritis</b>	<b>Srities įvertinimas, balais*</b>
1.	Programos tikslai ir numatomi studijų rezultatai	3
2.	Programos sandara	3
3.	Personalas	3
4.	Materialieji ištekliai	3
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	<b>Iš viso:</b>	<b>18</b>

\* 1 - Nepatenkinamai (yra esminių trūkumų, kuriuos būtina pašalinti)

2 - Patenkinamai (tenkina minimalius reikalavimus, reikia tobulinti)

3 - Gerai (sistemiškai plėtojama sritis, turi savitų bruožų)

4 - Labai gerai (sritis yra išskirtinė)

&lt;...&gt;

**IV. SANTRAUKA**

Studijų programos tikslas ir studijų rezultatai atitinka Europos kvalifikacijų sąrangos ir Lietuvos kvalifikacijų sąrangos 6 lygio aprašus. Studijų rezultatai aiškiai apibrėžti ir suprantami bei yra viešai prieinami. Studijų rezultatai yra vertinami ir peržiūrimi kiekvienais metais.

Studijų programos turinys, apimtis ir struktūra atitinka studijų lygmenį, kaip apibrėžta pirmos studijų pakopos reikalavimuose. Studijų programos apimtis gana plati. Studentams siūloma didelė įvairovė pasirenkamų dalykų, kad jie galėtų geriau pasiruošti darbo rinkai ir būsimai mokslininko karjerai. Studijų metodologija įvairi ir tinkama, tačiau atskirų dalykų studijų rezultatus reikėtų apibrėžti tiksliau.

Skaičiuojant kreditus pagal Europos kreditų perkėlimo sistemą (ECTS) atsižvelgiama tik į kontaktines valandas. Siekiant pagerinti studijų programą, skaičiuojant kreditus reikėtų atsižvelgti ir į laiką, sugaištą rengiantis dalyko egzaminui, ir pagal tai tolygiai paskirstyti ECTS kreditus.

Studijų dalykų turinys skelbiamas viešai. Taikoma įvairi vertinimo metodologija, tačiau ji turėtų būti labiau orientuota į gebėjimų ir mąstymo ugdymą, o ne vien tik į žinių įgijimą ir faktų išmokimą.

Nors pasirengimas bakalauro baigiamajam darbui gerai suplanuotas, bakalauro baigiamojo darbo kokybė labai skiriasi. Reikėtų užtikrinti, kad tokių skirtumų nebūtų.

Dėstytojų skaičius ir kvalifikacija pakankami, vyksta dėstytojų kaita. Tai užtikrina tinkamą studijų programos vykdomą. Universitetas remia mokslinių tyrimų veiklą ir skatina dėstytojus dalyvauti judumo programose. Dėstytojai stengiasi susieti savo dėstomą dalyką su moksliniais tyrimais. Tačiau dėstytojai turėtų skelbti dar daugiau mokslinių publikacijų ir labiau dalyvauti judumo programose.

Visos laboratorijos, auditorijos ir biblioteka yra gerai aprūpintos. IT technika ir programinė įranga yra nauja, prieinama ir užtikrina mokymosi galimybes. Plėtojamas nuotolinis ir mišrus mokymas. Yra susitarta dėl studentų praktikos atlikimo vietų.

Priėmimas į studijų programą vykdomas pagal teisinius reikalavimus. Universitetas įdiegė mokymosi visą gyvenimą (LLL) sistemą, pagal kurią pripažįstami ir vertinami neformaliojo mokymosi ir savišvietos rezultatai. Studentai skatinami dalyvauti mokslinių tyrimų veikloje. Svarbu, kad studentai būtų raginami lankyti paskaitas.

Pagal judumo programas išvykstančių į kitas šalis studijuoti studentų skaičius pakankamas; taip pat atvykta pakankamai pagal judumo programas studijuojančių studentų. Specialiųjų poreikių studentams skiriamas reikiamas dėmesys ir jiems sudaromos sąlygos studijuoti. Aktyviai veikia Jaunimo karjeros centras. Studentų pasirengimas pateisina profesinius lūkesčius. Jie įgyja reikiamas kompetencijas darbui atitinkamose įmonėse ir institucijose.

Kokybės užtikrinimo sistema pastebimai pagerinta. Kokybės valdymo procesas gerai reguliuojamas ir įgyvendinamas. Studentai ir socialiniai partneriai kartu su dėstytojais dalyvauja įgyvendinant kokybės užtikrinimo priemones. Reikėtų dar labiau įtraukti alumnus (absolventus) į kokybės užtikrinimo procesą. Vadovybė turi apsvarstyti, kokių priemonių reikėtų imtis, kad studijų programa būtų patrauklesnė ir įdomesnė. Taip pat reikėtų užtikrinti, kad dėstytojai daugiau laiko skirtų moksliniams tyrimams ir sumažinti jų dėstymo valandų skaičių.

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### **III. REKOMENDACIJOS**

1. Reikia patikslinti atskirų dalykų studijų rezultatus. Studijų rezultatai turėtų būti labiau orientuoti į įgūdžių ir bendrųjų kompetencijų ugdymą, o ne tik į žinių įgijimą.
2. Skaičiuojant kreditus pagal Europos kreditų perkėlimo sistemą (ECTS) atsižvelgti ne tik į kontaktines valandas, bet ir visą sugaištą laiką, skirtą pasiruošti dalyko egzaminui. Šį klausimą reikėtų spręsti rengiant apklausas arba diskusijas su studentais, besiruošiančiais egzaminams ar išlaikiusiais egzaminus.
3. Dėstytojai turi skelbti daugiau publikacijų pagrindiniuose tarptautiniuose mokslo žurnaluose (duomenų bazėje „Web of Science“).
4. Baigiamuosiuose darbuose turi būti keliami aiškūs klausimai ir hipotezės. Juose taip pat turi būti diskusijai ir išvadoms skirtos dalys, kuriose studentai parodytų kritinio mąstymo gebėjimus, palygintų ir vertintų tyrimų rezultatus ir remdamiesi rezultatais pateiktų logines išvadas.
5. Plačiau naudoti mokymo valdymo sistemą „Moodle“ plėtojant nuotolinį ir mišrų mokymą, didinti prieigą prie studijų medžiagos.
6. Nelankantys paskaitų studentai nesužino svarbios informacijos. Todėl studentus reikia raginti dažniau lankyti paskaitas.
7. Reikia užtikrinti pakankamą praktiniams ir laboratoriniams darbams skirtos medžiagos bei skrodinui skirtų gyvūnų kiekį. Padidinti laboratorinių darbų skaičių.

8. Dėstytojų kontaktinių valandų darbo krūvis labai didelis. Vadovybė turi ieškoti būdų, kaip sumažinti kontaktinių valandų skaičių, kad dėstytojai galėtų skirti daugiau laiko moksliniams tyrimams.
9. Jauniems dėstytojų padėjėjams ir lektoriams, jų karjeros kūrybiškiausiu metu, suteikti galimybę daugiau laiko skirti moksliniams tyrimams.
10. Palaikyti glaudesnę grįžtamąją ryšį su alumnais (absolventais).
11. Skatinti studentus, kurie dėl kalbos barjero nedalyvauja programoje „Erasmus“, dalyvauti šioje programoje (ypač per pirmą ir antrą semestrus).

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### **2.7. Gerosios praktikos pavyzdžiai \***

*Studijų saviorganizavimas:* didelė pasirenkamų dalykų įvairovė. Studentai gali rinktis ne tik su studijų programa susijusius dalykus, bet taip pat kitų studijų programų dalykus ir net kituose universitetuose dėstomus dalykus. Studentai taip pat gali rinktis gretutinę kryptį ir sudaryti savo studijų programą, kad geriau pasiruoštų darbo rinkai ir būsimai mokslininko karjerai.

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Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

Vertėjos rekvizitai (vardas, pavardė, parašas)