



STUDIJŲ KOKYBĖS VERTINIMO CENTRAS

Šiaulių universiteto  
***OPTOMETRIJOS* STUDIJŲ PROGRAMOS (612F36001)  
VERTINIMO IŠVADOS**

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**EVALUATION REPORT  
OF *OPTOMETRY* (612F36001)  
STUDY PROGRAMME  
at Šiauliai University**

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Išvados parengtos anglų kalba  
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## DUOMENYS APIE ĮVERTINTĄ PROGRAMĄ

Studijų programos pavadinimas	<i>Optometrija</i>
Valstybinis kodas	612F36001
Studijų sritis	Fizinių mokslų
Studijų kryptis	Fizika
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	Fizikos bakalauras
Studijų programos įregistravimo data	2009 rugpjūčio 31 d., Nr. 1-73

## INFORMATION ON EVALUATED STUDY PROGRAMME

Title of the study programme	<i>Optometry</i>
State code	612F36001
Study area	Physical Sciences
Study field	Physics
Kind 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 of Physics
Date of registration of the study programme	31 August 2009, No. 1-73

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## I. INTRODUCTION

The procedures of the external evaluation of Šiauliai University (hereafter – ŠU) Bachelor study programme in *Optometry* were initiated by the Centre for Quality Assessment in Higher Education of Lithuania nominating the external evaluation peer group formed by the head, professor Sven Anders Flodström, professor Bernard Remaud, professor Adam Kiss, dr. Artūras Acus, dr. Irmantas Kašalynas, and Paulius Simanavičius, students' representative.

For the evaluation the following documents have been considered:

1. Law on Higher Education and Research of Republic of Lithuania;
2. Procedure of the External Evaluation and Accreditation of Study Programmes;
3. General Requirements of the First Degree and Integrated Study Programmes;
4. Methodology for Evaluation of Higher Education Study Programmes.

The basis for the evaluation of the study programme was the Self-Evaluation Report (hereafter – SER), its annexes and the site visit of the expert group to ŠU on 22 of May 2013. The visit incorporated all required meetings with different groups: the administrative staff, staff responsible for preparing the self-evaluation documents, teaching staff, students of all years of study, graduates and employers. The experts' team evaluated various support services (classrooms, laboratories, library, computer facilities), examined students' final works, and various other materials. After the expert's team discussions and additional preparations of conclusions and remarks, introductory general conclusions of the visit were presented. After the visit, the team met to discuss and agree the content of the report, which represents the experts' team consensual views.

ŠU Bachelor's study programme in *Optometry* is implemented at the Department of Physics at the Faculty of Natural Sciences. The experts' team would like to pay attention, that this academic education in *Optometry* based on Bachelor in Physics degree is an interesting way to complement Bachelor's study programme, which is mostly oriented to the professional optometrist's activity.

## II. PROGRAMME ANALYSIS

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

The study programme aims as described in the SER are to educate high quality specialists of optometry, Bachelors' of Physics who: have recent knowledge in physics and optometry based on results of fundamental sciences, who would be able to apply the knowledge to solve non-standard tasks in a new of non-typical environment; hold abilities and skills of a high qualification optometrist; are able to fully examine vision, perform its correction, find likely features of eye diseases; having skills of creative work, enabling them to analyse and apply innovations of optometry under conditions of contemporary technological advancement; having skills of independent creative work, who are able to work in team. To the experts' team seems, that by those aims is seeking to match the requirements needed to deliver Bachelor in Physics study programme and also adequately prepare students for the optometrist profession. This is quite hard task and experts' team wonders, that probably it would be more clear to define the aims, also the study programme intended learning outcomes for the optometry separately from those in general physics; the former could be defined as a specialization.

The study programme intended learning outcomes are set along three axes: knowledge, understanding and their application. As well as there are anticipated intended learning outcomes of the second group – skills of particular scientific research and intended learning outcomes of the third group – general abilities. In the SER is displayed table, which shows the links between the study programme intended learning outcomes and the study subjects intended learning outcomes. Experts' team noticed, that the study programme has a clear professional orientation, many graduates find jobs in eye glass shops or eye glass chain stores, but the intended learning outcomes linked to the professional skills are missing. Also the problem arises, if one considers, that all students "do not follow the full curriculum"<sup>1</sup> – part of them enter study programme directly in the third year after validation of their previous studies. Such validation could be safely made if only the intended learning outcomes (particularly in physics) would be clearly specified.

In the SER is provided some information on the procedures on assessment if students have achieved the intended learning outcomes. The procedures of its' assessment seem effective and efficient for the achievement of the study programme intended learning outcomes in the scientific or specialized (optometry) domains (exams, reports, etc.). However, it is not clear how

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<sup>1</sup> Detailed information about the separate study plan and the knowledge of physics, which should be gained by the students, who enter the studies in a third year, was not provided in SER and during the site visit.

the general competencies and the intended learning outcomes linked to the professional activity are assessed, for example the course papers, practise reports and theses, which were made available to the experts and in particular those linked to the practice in an optometrist shop concentrate on the scientific aspects and do not consider other aspects which would allow students to follow up their progress and their achievements for the general and professional competencies.

As the conclusion for this evaluation area, the experts' team makes an observation that the study programme managers have made the choice not to deliver Bachelor in Optometry, but Bachelor in Physics study programme with the orientation to optometry. This difficult choice is approved by the majority of students, alumni and social partners, but it raises the risk that all students do not reach the basic knowledge and understanding level in physics, which opens the access to Master's degree.

The essential information about the study programme is provided on the Department of Physics website and is publicly accessible.

## ***2. Curriculum design***

During the evaluation of the curriculum of the first cycle *Optometry* study programme awarding Bachelor in Physics degree, the experts' team did not find anything that would be against the legal acts requirements: the duration of the study programme is 4 years for full-time study mode. The scope of the study programme is 240 ECTS credits. Curriculum consists of general university study subjects (21 ECTS credits), subjects on general basics of the study area (171 ECTS) and speciality subjects in the study field (48 ECTS credits). Such division also includes free elective subjects (12 ECTS credits), practices (15 ECTS credits) and Bachelor theses (12 ECTS credits). However, the experts' team concerns, that students with other than physics higher education background and practical experience in optometry field have a possibility to enter study programme in the third year and graduate in Bachelor of Physics degree.

The analyses of study plan and the discussion with the students proved that the study subjects are evenly distributed in the first two years of study, but taking into account the last two years of study, in experts point of view, study subjects in the field of physics are not evenly distributed – *Optometry* gets more weight in the last two years. From the fifth semester the focus of the study programme is on optometry, but the attention should be paid, that the credits in optometry constitutes just 20% of the total amount of credits, i.e. 48 credits. As far as all students of this

study programme want to become optometrists, the experts' team highly recommends to review the credits allocation, seeking to ensure the achievement of the intended learning outcomes.

The content of the study subjects are consistent with the first level and type of studies. During the discussion with experts', students expressed their satisfaction about the absence of any repetitions in the curriculum. However, experts' team recommends to include into the curriculum more various elective study subjects.

### ***3. Staff***

The staff of ŠU teaches almost all study subjects in the study programme. There are 23 teaching staff members, including 19 PhDs (83%), 14 professors or assoc. professors (61%), 9 lecturers (39%). Additional teaching staff from Lithuanian University of Health Sciences, Vytautas Magnus University, and Vilnius University is invited to give mainly specialized courses in the optometry field. Qualified optometry specialists also are involved in the study programme to supervise students during they practices.

Despite of commendable efforts to invite lecturers from other universities to teach optometry field subjects, the number of the teachers is not adequate to ensure the achievement of the intended learning outcomes related to the physics field. Mostly it happens, because of the reason, that one person in the study programme is responsible for up to 3 and even more courses in different fields. Two teachers appeared to be responsible for up to 5 different courses. As though, concerning the mentioned point, it is recommended to invite qualified teaching staff from other higher education institutions. Also experts' team noticed, that at the University and the Department level there is a lack of encouragement for staff to take part in scientific research projects, to attend scientific conferences and to participate in international mobility programmes (in a period 2008-2011 just 5 teachers participated in internships and secondments). Especially this issue becomes relevant, when one bears in mind staff qualification in physics field. Staff qualification in optometry field is of a high quality and strongly supported by social partners (the teaching staff is involved in the research activity related to the optometry through the optic saloons located in different cities of Lithuania).

Staff turnover is partly sufficient. There is only 1 teacher who is under 40, while 6 professors are over 60 years. Experts' team suggests in a long-term perspective to pay attention to the recruitment of new generation of teachers.

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

Two (Natural Sciences and Mathematics and Informatics) faculties of the Šiauliai University provide the premises for the study programme. Size and quality of available auditoriums and computerized classrooms are sufficient for the implementation of the study programme: there are 3 auditoriums for students flows, 9 auditoriums for group work. Three auditoriums are equipped with stationary multimedia equipment. In other auditoriums, portable multimedia equipment can be used. Computer classes are equipped with the needed hardware and software.

Material resources of the study programme are adequate both in their size and quality. There are two laboratories devoted for general physics courses, and one for optometry. The equipment dedicated to the general physics could be defined just as "basic" and on some points outdated.

The optometry laboratory is equipped with modern instruments and tools needed for an optometrist. There are, for example, ophthalmologist's work place, computerized refractometer, ophthalmoscopes, dioptermeters, electronic pupilometer, eye moulages, computerized topographymeter, systems for polishing glass lenses, etc. Modern stands for examination of the range of vision, inertness of eye, eye reaction are also present. The study programme have adequate arrangements for students' practice.

Teaching materials like textbooks, books, periodical publications, databases related to the study subjects are adequate and accessible at the University Library, which is one of the most modern libraries in Lithuania. In 2008 it was essentially renovated, therefore conditions for work, taking into account the flexible time table oriented towards the demand of students – the Library is open on work days until 8 p.m., on Saturdays until 4 p.m. During the period of preparation of final theses and examination sessions, the opening hours are extended until 10 p.m. Furthermore the electronic database system installed in the Library helps to get publications from other libraries. Library subscribes printed copies of specific scientific journals, such as the "Optometry and Vision Science", the "Journal of Vision", and the "Eye". The Library has a good collection of textbooks related to optometry.

Almost all teachers have prepared electronic versions of their lecture notes. Some of them are available on Department of Physics website. The reading material required for the study programme is provided through the MOODLE tool to the students and the teaching staff as well.



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

The admission requirements to the Bachelor in *Optometry* study programme are set up according to the rules for Lithuania higher education and for the specific host university. In summary, the students can apply to the study programme after their successful secondary school exams from the first year, or to enter the studies with higher education and practical training background later, from the third year.

The number of students admitted to the first year fluctuated not more than 3 persons to the average of 7 students in the last 5 years. However, the number of state financed students went back from 7 to nil from 2008 to 2013. Instead of that students were financed from other external sources. Remarkable, that in academic year 2011/2013 there were 15-22 students, who entered the study programme in the third year.

According to the data provided in SER, almost all students can manage their studies on the basis of the prescribed schedule and there are only few that fail. The number of graduates is relatively high – in a period 2010/2012 – 52.

Most aspects of the study process seem to be adequately organized. This is especially visible for those who entered the study programme from the third academic year. As these students have almost all full-time jobs besides the *Optometry* studies, the organization of the study requires their direct involvement. Students have not expressed any complaints about study process organization.

Another point of importance is the procedure of examination schedules. These are prepared jointly between the teachers and the students. This is also true for the knowledge, understanding, competences, for exercises and for laboratory work reports. All these together help the students to achieve the intended learning outcomes. In general, the assessment system of the performances of the students is adequate and is publicly available.

The right development of a student includes the international mobility. Without mobility it is impossible to get acquainted with the scientific and technological achievements on international level. Therefore it is one of the major shortcomings of the study process of this programme that students mobility is rather low (in the period 2009–2010 3 students expressed their wish to study at the University of Latvia, but only one went there. While incoming students numbers are higher – in the period 2008-2010 7 students from Turkey, Suleyman Demirel University came to study *Optometry* study programme at Šiauliai University). The attention also should be paid, that students and graduates do not take the opportunity to speak in English language, despite of the

fact that, for example, graduates are considering to attend Master's study programmes outside Lithuania. They emphasized, that they prefer Russian language for their studies instead of English or any other European language.

During their studies, students are in a continuous interaction with teachers. It was confirmed by the students, that those who have difficulties can get advices and help on academic, social and personal issues. The students, who wish, get dormitories, access sport and cultural activities.

As almost all students in this study programme are planning to become optometrists, the labour market is known for them. In addition, the Career Centre of the University may help to find the connections with the possible employers.

Most of the students, who will graduate in *Optometry* study programme, will have jobs in their field of study. During the visit two students expressed their willingness to enter Master's degree studies. If they want to continue their studies in optometry field, they have to look for appropriate study-place in another country, because in Lithuania there are no options to continue optometry studies in higher education institutions. The discussion with the social stakeholders implied that the majority of the graduates meet the expectations of the social partners.

## **6. Programme management**

Study programme committees at Šiauliai University are appointed to each study area. The activity of study programmes' committees is coordinated by the Vice-rector for Studies, regularly inviting chairpersons of committees to the sittings dedicated to the discussion of new or revision of existing documents regulating design and delivery of the study programmes. Besides of study programmes' committees each study programme at Šiauliai University has a Group for Monitoring of the Study Programme's Quality (hereafter – the Group), which organises supervision, monitoring and improvement of the study programme. The group consists of 5 members: 3 teaching staff members and 2 social stakeholders – social partner and student. Concerning the *Optometry* study programme, it is supervised by the Head of Physics Department.

The procedure of making changes in the *Optometry* study programme goes in this way: first of all changes are discussed in the Group, afterwards they are presented at the Department of Physics. If changes are approved, they are discussed at the Study Programme Committee of the Faculty of Natural Sciences. The last one element of the procedure is the discussion and approval of changes in the Council of the Faculty of Natural Sciences.

However one of the most important roles<sup>4</sup> in study programme management goes to supervisor of the study programme. On this point, the study programme *Optometry* has a strong and dedicated leadership, which is commendable.

The essential indicators of the study programme quality are the results of the opinion surveys of teaching staff, students, alumni and social partners. Usual forms in sharing opinions between students, teaching staff and social partners are discussions after theses graduation, students practices, also students are filling the questionnaires about the quality of study subjects and have their representatives in administrative bodies. As though, the internal quality assurance system operates, however further efforts should be made in developing more systematic approach in this field.

During the site visit to the experts<sup>4</sup> team became clear that the priority of the management was to educate optometrists. Almost all students' future plans were about a professional career as optometrists, where the labour market in Lithuania is dominated by eyeglass chain stores. The study programme management needs to take further efforts to balance the professional dreams and the students' motivation to become optometrists with the awarding Bachelor in Physics degree that actually allows students to apply for Master's studies. The interesting fact is, that experts's team met only two students who considered an academic career after graduation in *Optometry* study programme, while the degree awarded is Bachelor in Physics. The study programme managers are aware of this situation, but in practise the management struggle to find staff, especially, when we are talking about general physics field, of the right academic quality. The size and scientific competence constraints of the staff complicate planning and implementing of the study programme. The specialisation in optometry would be an excellent example of orientation to professional education, with a well-balanced curriculum, practise and internships.

### **III. RECOMMENDATIONS**

1. To review the definition (separation aspect should be important) of physics and optometry fields intended learning outcomes, also it would be useful to review the aim and concept of the study programme, orienting it to the Bachelor degree in Physics with the specialization in optometry.
2. To define clearer assessment methods, seeking to evaluate if general and professional skills were achieved.
3. To review optometry field credits allocation in the curriculum, seeking to ensure, that the study programme intended learning outcomes will be achieved.
4. To take action seeking to ensure, that all students have achieved the intended learning outcomes in the field of physics, particularly those admitted directly in the third year.
5. To expand the base of free elective subjects.
6. To pay attention to the qualification and number of the teaching staff, especially in the field of physics.
7. To increase the numbers of the staff and students participation in international mobility programmes.
8. To implement more systematic approach in the internal quality assurance.

## IV. SUMMARY

The main strenghts of *Optometry* Bachelor study programme:

- Orientation to practical activity and close relation to social partners;
- Talented and highly motivated students;
- Well organized study process;
- Strong leadership.

The main weaknesses of *Optometry* Bachelor study programme:

- The existence of discrepancies between the offered degree and the concept of the study programme;
- The lack of specifying of the intended learning outcomes in physics field and the assurance, that those were achieved by the students;
- The lack of clear assessment methods of the general and professional skills achievement;
- The lack of qualification of the academic staff in physics field;
- Low students and teachers mobility numbers;
- Lack of the more systematic approach in internal quality assurance.

## V. GENERAL ASSESSMENT

The study programme *Optometry* (state code – 612F36001) at Šiauliai University is given **positive** evaluation.

*Study programme assessment in points by evaluation areas.*

No.	Evaluation Area	Evaluation Area in Points*
1.	Programme aims and learning outcomes	2
2.	Curriculum design	3
3.	Staff	2
4.	Material resources	3
5.	Study process and assessment (student admission, study process student support, achievement assessment)	3
6.	Programme management (programme administration, internal quality assurance)	3
	<b>Total:</b>	<b>16</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.

Grupēs vadovas:

Team leader:

Prof. Sven Anders Flodström

Grupēs nariai:

Team members:

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Paulius Simanavičius

**ŠIAULIŲ UNIVERSITETO PIRMOSIOS PAKOPOS STUDIJŲ PROGRAMOS  
OPTOMETRIJA (VALSTYBINIS KODAS – 612F36001) 2013-08-14 EKSPERTINIO  
VERTINIMO IŠVADŲ NR. SV4-299 IŠRAŠAS**

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**V. APIBENDRINAMASIS ĮVERTINIMAS**

Šiaulių universiteto studijų programa *Optometrija* (valstybinis kodas – 612F36001) vertinama **teigiamai**.

Eil. Nr.	Vertinimo sritis	Srities įvertinimas, balais*
1.	Programos tikslai ir numatomi studijų rezultatai	2
2.	Programos sandara	3
3.	Personalas	2
4.	Materialieji ištekliai	3
5.	Studijų eiga ir jos vertinimas	3
6.	Programos vadyba	3
	<b>Iš viso:</b>	<b>16</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)

**IV. SANTRAUKA**

Pagrindinės *Optometrijos* bakalauro studijų programos stiprybės:

- Orientacija į praktinę veiklą ir glaudus ryšys su socialiniais partneriais;
- Talentingi ir labai motyvuoti studentai;
- Tinkama studijų proceso organizacija;
- Stipri lyderystė.

Pagrindinės *Optometrijos* bakalauro studijų programos silpnybės:

- Neatitikimas tarp suteikiamo kvalifikacinio laipsnio ir studijų programos koncepcijos;
- Nepakankamai aiškiai apibrėžti (svarbus atskyrimo aspektas) fizikos srities numatomi studijų rezultatai, taip pat užtikrinimo, kad studentai juos pasiekė trūkumas;

- Aiškių vertinimo metodų, susijusių su bendrųjų ir profesinių įgūdžių įgijimu, trūkumas;
- Nepakankama fizikos studijų dalykų dėstytojų kvalifikacija;
- Žemi dėstytojų ir studentų judumo rodikliai;
- Sisteminio požiūrio į vidinį kokybės užtikrinimą trūkumas.

### III. REKOMENDACIJOS

1. Peržiūrėti fizikos ir optometrijos sričių numatomų studijų rezultatų apibrėžtis (svarbus atskyrimo aspektas), taip pat būtų naudinga peržiūrėti studijų programos tikslą ir koncepciją, orientuojant šią studijų programą į fizikos bakalauro studijų programą su optometrijos specializacija.
2. Siekiant įvertinti bendrųjų ir profesinių įgūdžių įgijimą, turėtų būti nustatyti aiškesni numatomų studijų rezultatų vertinimo metodai.
3. Peržiūrėti optometrijos srities studijų dalykų kreditų paskirstymą, siekiant užtikrinti, kad bus pasiekti studijų programos numatomi studijų rezultatai.
4. Panaudoti visas reikiamas priemones siekiant užtikrinti, kad visi studentai (ypatingas dėmesys turėtų būti skiriamas tiems, kurie priimami į trečią kursą) pasiektų numatomus studijų rezultatus, susijusius su fizika.
5. Padidinti laisvai pasirenkamų studijų dalykų skaičių.
6. Atkreipti dėmesį į studijų programoje dėstančių dėstytojų skaičių ir kvalifikaciją, ypač tų, kurie dėsto fizikos studijų dalykus.
7. Padidinti tarptautinio judumo programose dalyvaujančių dėstytojų ir studentų skaičių.
8. Vykdyti sistemiškesnį vidinį studijų kokybės užtikrinimą.

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Paslaugos teikėjas patvirtina, jog yra susipažinęs su Lietuvos Respublikos baudžiamojo kodekso<sup>2</sup> 235 straipsnio, numatančio atsakomybę už melagingą ar žinomai neteisingai atliktą vertimą, reikalavimais.

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<sup>2</sup> Žin., 2002, Nr.37-1341.