

Approved

By order of the Rector of (N(N)LE
Saint King Tamar University of
Patriarchate of Georgia
#01/1/16, of 14.05.2021

Non-entrepreneurial (Non-commercial) Legal Entity -

Saint King Tamar University of Patriarchate of Georgia

Undergraduate Program

Program title: Physical Medicine and Rehabilitation **0915.1.1**

Qualification/academic degree to be awarded: Bachelor of Physical Medicine and Rehabilitation

Program volume in credits: 248 (ECTS) Credits

Basic Educational Structural Unit Implementing the Program:

Faculty of Biomedical and Natural Sciences and Healthcare.

The head of the program: Giorgi Chakhunashvili, Professor of St. King Tamar University of the Georgian Patriarchate, Doctor of Medicine

Language of instruction: Georgian

The program purpose

The program aims to prepare highly qualified, competitive specialists in the Physical Medicine and Rehabilitation field following current standards of education, who will know the basic scientific concepts of the Human Norm and Pathology Sciences on the microbiological and immunological diagnostics; on the principles of environmental and occupational factors influence on the health of the population; on the basics of diagnosing and managing disease mechanisms, infection, immune and inherited diseases, and emergency and critical conditions.

Current theories, principles, methods, and means of Physical Medicine and Rehabilitation, methods of adaptation of the human body to physical activity, principles of athletes nutrition, Kinesio-correctional measures, and rehabilitation means.

The program aims to prepare a full member of the optimal outcome-oriented multidisciplinary medical team - Bachelor of Physical Medicine and Rehabilitation, who by promoting physical and cognitive function, activity, involvement, modification of personal or environmental factors, ensures prevention, diagnosis, and rehabilitation management of current pathologies with disability at any age, implementation of rehabilitation activities directed at improving functional capacity in the case of acute or chronic conditions;

The Program Admission Preconditions

The Program admission preconditions are: The person holding a state certificate of full general education or a person equal to him/her, has the right to participate in the Bachelor's Program and will be enrolled in the unified list of the University students according to the established rule.

For the citizens of Georgia - the results obtained in the Unified National Examinations, taking into account the priorities of the subjects established by the University and duly announced, and their respective coefficients. Foreign citizens will be admitted to the program according to the rules defined by the Ministry of Education of Georgia. The following persons shall be admitted to the program: foreign nationals and stateless persons who have received a full general or equivalent education in a foreign country; citizens of Georgia who have received full general or equivalent education in a foreign country and have studied abroad for the last two years of full general education; persons who study/have studied and received credits in a foreign country in a higher education institution recognized according to the legislation of that country.

According to the admission requirements of the program, subjects, priorities, and coefficients are defined by the level of knowledge required to start the given program.

to start the given programme. Subjects and their coefficients are non-permanent, change according to the quality improvement strategy to achieve the program outcomes, and are published annually following established rules.

Enrollment in the Bachelor's Program is also possible through the mobility under the Georgian legislation and in accordance of the University regulations. The terms of admission to the program and other information related to the admission is annually placed on the website of the National Center of Evaluation and Examinations and the University.

Student's learning outcome

a) Knowledge:

Has an extensive knowledge of the field that includes critical consideration of theories and principles, understanding of the complex issues of the sphere, namely: Anatomical, physiological, pathophysiological features of the human body and its constituent elements, tissue structures of the body, metabolic processes in the human body, metabolism; Physiological and biochemical factors related to physical exercise and their impact on human health; Functional changes in the body during and after fatigue; ways and means of their recovery; Kinematic characteristics of motion and modern methods of analysis of some movements.

Current theories, principles, methods and means of physical medicine and rehabilitation;

Fundamental provisions of Traumatology. Common evaluation of the traumatic condition and first aid for the injury. General and sports hygiene norms and requirements;

Types and peculiarities of physiotherapy, indications, and contraindications for the appointment of physiotherapy procedures.

Forms and types of massage, their importance for maintaining muscle tone, the impact of the massage mechanism on the body. Methods of restoring and strengthening the health of athletes in conditions of intensive training and rest-recovery. Classification of therapeutic exercise with various signs and clinical and physiological significance of physical exercise on the human body;

Topical issues and peculiarities of the psychological training of the athlete; analysis of mental processes; maintenance of psycho-physical forces - peculiarities of recovery.

Individual strategies of adaptive physical education and sports training;

Determining the diet of athletes and non-athletes; the basic principles of rational and balanced nutrition, methods of their evaluation.

Has a profound knowledge of the basics of physical medicine and general rehabilitation, electro-diagnostics, and electrotherapy, physiotherapy, therapeutic modalities, massage, manual therapy, acupuncture, fitness, orthopedics, and orthotics, the basics of sports medicine.

b) Ability:

To determine and successfully implement rehabilitation measures according to the types of sports and rehabilitation deadlines using the latest methods and approaches of physical medicine and rehabilitation;

To determine methods of enhancing human health and develop physical properties; to select medical rehabilitation tactics for various diseases and injuries;

The general evaluation of the traumatic condition and choice of treatment tactics;

To develop a first aid and prevention scheme for traumatic injuries based on medical history and analysis; use the tools and methods needed to enhance the physical characteristics of people with disabilities in various medical and age groups;

To adjust special loads according to the age, sexual, physical, and functional abilities of adults and determine their intensity;

To select healing physical exercises and evaluate results;

To determine the impact of physical exercises and sports on the human body, its psycho-physical capabilities by innovative methods and to develop a complex of special physical exercises.

To develop an individual rehabilitation plan based on the needs of individuals with physical and cognitive developmental disabilities;

To know and practice various massage techniques; proper determination of athletes' diet;

To select and apply individual recommendations for disease prevention, properly plan preventive measures, timely and safely use medical-rehabilitation means;

To identify psychological and social problems and manage the situation within the competence. Can think critically and able for self-critique;

Can identify and solve problems. Can plan and manage time correctly,

collect and interpret data specific to the field, as well as analyze isolated data and situations using standard and some distinctive methods, form a reasoned conclusion:

Analysis, critical evaluation and conclusion of literary sources and information data. Defining the ways of problem-solving.

Assess the situation and determine appropriate preventive measures; Analysis and evaluation of sports

- rehabilitation and rehabilitation activities;

Can use the proven method according to the case and make competent conclusions when processing the results of laboratory and instrumental tests;

To make reasoned conclusions for increasing the efficiency of the rehabilitation-recovery process, based on the analysis of the dynamics of physical medicine and rehabilitation development and other indicators.

Is able to find, analyze, interpret and synthesize information and data from various sources in order to make reasoned decisions;

Has the ability to carry out laboratory research procedures and make conclusions within the scope of competence, analyze the problem and work out ways to solve it;

To reason and defend the management decision. To reconcile the opinion correctly and express own position.

Has an ability to prepare the detailed written report on existing problems and their resolution, to verbally transfer the information to specialists and non-specialists in Georgian and English, to use creatively modern information and communication technologies;

Can accurately provide medical documents and other materials using appropriate technologies; Can inform, educate and supervise the patient as well as family members;

Can communicate with patients, their families, and social groups, as well as people with communication problems; can communicate orally and in writing in Georgian and English;

Can use information and communication technologies; can work in a group; has teamwork skills; can interact/dialogue with people.

Can actively participate in conferences, symposia on problematic issues in the field and make a public presentation of conclusions. **Responsibility and**

Autonomy

To evaluate one's own consistent and multilateral learning process, determine the further learning needs;

To develop motivation for gaining new knowledge, as a result of understanding the need to evaluate and improve own knowledge and skills;

To plan own learning process, define need of learning in a certain direction (Graduate, Doctoral studies). Understands and takes responsibility for his/her own professional development and learning;

Participates in the process of forming values and strives to establish them. The graduate understands the professional, ethical, and legal norms in the field of physical medicine and rehabilitation, the basic principles of medical ethics, patients' rights,

the rights of the disabled, the principles of relations with colleagues, the principles of health law, and performs them in the daily activities, which leads to acting per inherent in professional activities values in various situations, realizing the importance of social integration of people with disabilities.

Appreciate and respect the differences and cultural diversity between people, participate in the process of shaping the values of the health care system and its establishment.

Has professional responsibility and the ability to apply ethical and legal principles in medical practice, the ability to protect confidentiality.

Methods for accomplishing learning outcomes

Teaching and learning methods and the means of their realization will be used to achieve the learning outcomes of the program:

The teaching/learning methods used in the teaching process of the concrete learning course that is component of the program are indicated in the syllabus of each training course.

Lecture - conveying a learning material to students in a regular and consistent manner; explanation of the topic or any issue for discussion. It is active when it takes the form of a dialogue, while is passive in the form of a monologue. Within the training course, lectures are offered with presentations in an interactive mode. Lectures are conducted using demonstration materials (atlases, posters, tables, etc.) and current computer technology.

Verbal or oral method - In the mentioned process, a lecturer verbally transfers and explains the educational material, while students actively understand and comprehend it by listening, memorizing and understanding.

Explanatory Method - a detailed explanation of the theoretical material, if required, using visual aids. **Demonstration method - this method implies visual presentation of information.** It is quite efficient in terms of achieving the outcomes. Frequently, the material is delivered to students simultaneously in audio and visual form. The study material can be demonstrated by both the teacher and the student. This strategy visually presents the essence of the issue/problem. Demonstration might be of a simple type.

Practical training - individual practical work of the student with the patient, doctor's assistance. Practical lessons are held as curation in the clinic/auditorium, where the discussion of the key topics of the lecture material takes place; visuals will be used: posters, video-materials.

Practical methods - integrates all forms of teaching that develop practical skills of the student. In this case, the student independently performs this or that action based on the acquired knowledge, for example, practical skills development through clinical practice.

Demonstration of practical skills - differentiation of physiological and pathological condition of the patient, assessment of physical and functional condition, development of individual / special rehabilitation measures;

Case Study - Discussion of situational tasks - complex/atypical cases that may require

additional information about the disease, differential diagnostics, and diagnosis; Defining a treatment plan and demonstrating practical skills can be done in the form of group work. It promotes analytical thinking - skills of analysis and synthesis, group work, clinical reasoning, and decision-making; skills to participate in medical discussions, have efficient communication with colleagues in a medical context.

Analysis and Synthesis - Analyze and synthesize data within a particular clinical case and make relevant conclusions.

Quiz / Theoretical material survey - consists of theoretical and practical issues, tests the student's theoretical knowledge. **The laboratory method** involves the following actions: showing video material, dynamic material, etc.

E-learning - involves managing the learning process using a learning process management system. The Learning Management System is an Internet-based software, which is necessary for the organization and conducting the learning process based on the information and communication technologies, in particular, for the provision of learning materials, for communication with a student or/and teacher of the higher education institution, testing, advising, monitoring of student progress and other purposes.

E-learning is carried out in the form of asynchronous or synchronous communication. Asynchronous communication envisages the interaction when a sender and a recipient of the information are not communicating simultaneously, and synchronous – when the communication is simultaneous. The e-learning program is built in accordance with the requirements set by law for the higher education program.

The entirely distance learning considers conducting an academic process without a physical presence of a professor. The training course is conducted in electronic format remotely from beginning to end.

Based on the specifics of the component of the educational program, for achieving the learning outcomes, any other teaching/learning methods/activities may also be applied.

Students' independent work - is the amount of working time (work) spent for successful mastering of courses provided by the curriculum from the introduction-study of basic literature - to group work and preparation for the midterm and final exams. The results of the midterm exam will be discussed.

In each component of the educational program, due to its specifics, those methods and activities of teaching and learning are applied, which condition the efficient achievement of the learning outcomes provided by that component, while their entirety ensures the achievement of the learning outcomes envisaged by the educational program. The teaching/learning methods/activities used to achieve the learning outcomes of the educational program component are outlined in the syllabi.

Student's Knowledge Assessment System

The aim of the evaluation of student's knowledge, achieved progress, is to qualitatively determine his/her learning outcomes with regard to educational goals and parameters.

Within module / learning course the structure of assessment is divided into two elements, such as midterm assessment and final assessment. Each has its percentage share in the assessment system. The midterm element of the evaluation can be divided (attendance, activity, presentation of the abstract, practical work, etc.) into components, which also have their percentage share within this element. Taking into account the relevant percentage share, each concrete assessment is based on the results of the sum of both elements.

The format of the midterm assessment, as well as of the final exam (written, oral), assessment components and their relative share, is determined by the leading staff of the academic course, through the learning course (syllabus).

According to the scale of Transfer and the European Credit Accumulation System (ECTS), for evaluation of students' knowledge is used a credit - a unit, which expresses the volume of work performed by the student to complete one subject, reflected in the time unit - in hours.

Credits can be obtained only after achievement of learning outcomes by the student planned according to the learning course (syllabus), which is reflected by one of the positive assessments provided by the established assessment system.

It is unacceptable to evaluate the learning outcomes reached by a student on a one-time basis - it must be done only by evaluating the final examination. The evaluation of the student's knowledge by a certain ratio considers midterm and final examination.

The maximum evaluation for the academic course equals to 100 points:

The final examination is not evaluated by more than 40 points. The right to repass a final examination shall be given to the student who accumulates, 51 scores, taking into account the maximum scores of the midterm evaluations and the final examination. The minimum competency threshold is defined in the evaluation component that is reflected in the syllabus of the educational program component. The sum of minimal margin of competence of the midterm evaluation and maximum point of the final evaluation shall not be less than 51 points, while minimal margin of competence for the final evaluation shall not exceed 50% of final evaluation (which equals to no less than 20 points).

The student's knowledge determination is allowed: a) Five types of positive evaluations:

a) (A) Excellent – 91% and over of maximum grade; b) (B)

Very good - 81-90% of maximum grade; c) (C) Good - 71-

80% of maximum grade;

(D) Satisfactory - 61-70% of maximum grade; (E) Sufficient - 51-60% of maximum grade.

b) Two types of negative grades:

b.a) (FX) Did not pass - 41%-50% of the maximum grade, meaning that a student requires some more work before passing and with independent work is given the right to retake additional exam once again. The additional examination shall be appointed in no less than 5 days after publishing the results of the final examination results.

b.b) (F) Fail – 40 and less of maximum point, which means that the work carried out by the student is not enough and he/she has to retake the course.

The date for appointing an additional examination in case of getting FX in an educational program component will be appointed no later than 5 days after the announcement of the examination results.

The amount of points received in the final evaluation is not added to the evaluation received by a student for the additional exam.

The evaluation received for the additional examination is a conclusive evaluation and it will be reflected in the final evaluation of the educational program component.

Taking into consideration the evaluation received at the additional examination, if a student receives 0-50 points in the final evaluation of the academic component, he/she will receive the evaluation - F-0 points.

The student has the right to request his/her knowledge to be fairly evaluated and appeal undesirable examination results in accordance with the established rule. A student who does not agree with the result of the examination is entitled to file a substantiated complaint with the Dean of the Faculty

no later than three working days after the examination and request a revision of the result. The evaluation forms, the evaluation components and methods are described in detail in the syllabi of the academic courses in accordance with the specifics of the academic course.

The student's bachelor program is considered to be completed if he/she has accumulated credits provided by the educational program and successfully defended the Bachelor's Thesis in accordance of the rule established within the University.

The Bachelor's thesis is a kind of summary work, by which the student's reasoning, analysis and synthesis skills are checked in the specialty, as well as the ability to see and evaluate problems. It reveals the compliance of the student's level of knowledge and the level of creative, research skills with the requirements determined by the Bachelor's Program.

Bachelor's thesis should meet the requirements listed below:

a) Bachelor's thesis should not be less than 30 pages of A-4 format. Font: „Sylfaen“; Font size: 12; Headings/subheadings size: 14; Space between text lines: 1,5; page margins (from all sides): 2 cm;

b) The following components should be considered in the structure of the Bachelor's thesis: b.a)

Cover page (the first page of the Bachelor's thesis);

b.b) Annotation (should not exceed one page, should reflect the structure, objectives and brief conclusion of the Bachelor's thesis); b.c)

Introduction (substantiation of the topic's urgency, goals, objectives, research subject and methods used);

b.d) Main part of the text (should be divided in chapters and paragraphs. It can be attached by diagrams, tables, drawings); b.e) Conclusion (should reflect the results of the Bachelor's thesis);

b.e) The list of used literature (should be presented at the end of the thesis in alphabetical order. First editions published in Georgian and then in foreign languages).

b.f) The following should be indicated in the bibliography:

b.f.a) In the event of using a periodical: Surname and initials of the author (authors), title of the work, year, volume/number, name of the scientific journal (in italics), Edition number and pages, where the thesis has been published;

b.f.b) In the event of using a book or a monograph: Surname and initials of the author (authors), title of the work (in italics), publishing year, place, publishing house;

b.f.c) In the event of using the Internet resource: Surname and initials of the author (authors) of the material, author of the web-site, title of the material with a link, web address, date of finding the material;

b.f.d) In case of using an electronic edition: Surname and initials of the author (authors) of the article, title of the article, year, name of the electronic publication (in italics), number of the publication, chapter, paragraph (written in parentheses), web address and date of finding the material;

b.f.e) In case of using governmental documents: Name of the country, name of the institution, whom the document belongs to; Type of the document (order, law and etc.), name of the document with the relevant identification number and indication of a year, place of the publishing house, where the indicated document was found and the name of the publishing house, where the indicated document was found; b.f.f) The literature used in the text should be marked as follows: At the end of the quotation a bracket is opened and a number of named literature is written by the attached list and is embedded with a comma. Then the pages are indicated, from which the quotation or the thesis is taken. (e.g. 15, 150-161);

b.f.g) Footnotes should be used in the main part of the work to indicate additional information (e.g.: See Annex 2).

c) The thesis should be bound in the following sequence: The cover page, Annotation, Table of contents, Introduction, Chapters, Conclusion, Bibliography and Appendix (footnotes).

The student has a supervisor while working on the Bachelor's thesis. The supervisor of the Bachelor's thesis is selected by the student from the academic staff of the university. The Bachelor's student is able to choose the topic and supervisor of the Bachelor's thesis only after covering 210 credits, at the beginning of the 8th academic semester, not later than one month after the beginning of the academic semester. The topic of the bachelor's thesis can be changed only once, not more than two months before the end of the submission period, in agreement with the supervisor and by submitting a written application to the Dean of the main educational structural unit (faculties) of the University.

Supervisor of a Bachelor's work: Assists the student in guiding the bachelor's thesis in the right direction, helps him / her to select a topic, compile a work plan and develop a bibliography; Checks the progress of the student's work on the topic, expresses remarks and recommendations; In the case of directing the research in the wrong direction, helps the student in its correction; After the student completes the work on the bachelor's thesis, following the rules established by these internal regulations, reviews the bachelor's thesis (preliminary review) and evaluates it within 60 points no later than 2 weeks.

The supervisor of the bachelor's thesis has the right to make a reasoned refuse to supervise bachelor's thesis of the student in writing, both before the start of the work and during the work on the topic, not later than one month after the beginning of the work. The Bachelor's thesis is defined in the general evaluation system by an independent percentage share, and the evaluation received as a result of its defense in accordance with the established rule is indicated in the standard annex of the relevant diploma.

The maximum grade for the bachelor's thesis is equal to 100 points, which is divided into the following components of the evaluation:

a) Pre-examination of the bachelor's thesis - by the head of the bachelor's thesis is evaluated with 60 points, according to the following criteria:

a.a) Novelty and relevance of the topic - 10 points

a.b) Thoroughly researched relevant literary sources, their systematization - 10 points; a.c) Ability to study and present the materials around the research topic - 10 points;

a.d) Ability to identify, research and analyze the problem, consistency of reasoning - 20 points; a.e) Technical, stylistic and grammatical correctness of the paper - 10 points.

b) Public Defense of the Bachelor's thesis - is evaluated by 40 points by the Faculty Council according to the following criteria: b.a)

Comprehension of the submitted paper -10 points;

b.b) Verbal part of the presentation - 15 points; b.c)

Technical part of the presentation - 5 points;

b.d) Answer given to questions, comments and recommendations - 10 points.

To obtain the right to present Bachelor's thesis for public defense, a student must have accumulated at least 11 points at the preliminary review of a Bachelor's thesis.

The evaluation score of the Bachelor's thesis is calculated using the arithmetic mean of the points written by the Faculty Council. The Bachelor thesis will be considered fulfilled by the student, if he/she accumulates 51 points or more.

In case of evaluation of the Bachelor's thesis by 41-50 points, the student is additionally given the right to publicly defend the Bachelor's thesis once. The interval between the public defense and the additional defense of the Bachelor's thesis should be not less than 10 days. And in case of evaluating of the bachelor's thesis by 0-40 points, the student is given the right to choose a new topic and to defend the bachelor's thesis before the Faculty Board in accordance with the established rule.

Information on the human resources necessary for the implementation of the educational program

The human resources required for the implementation of the program are defined by the academic staff of seven university Professors, and four Associate Professors. as well as 25 invited specialists (teachers), who have the necessary knowledge/skills to produce the learning outcomes of the program, holding the academic degree of Doctor or equivalent, professional experience, special training and other competencies according to the requirements of the legislation. See Annex

The employment agreements concluded with academic staff and invited specialists (teachers) according to the rules established by the legislation of Georgia.

Information about material resources, needed for the program implementation;

The program is implemented on the base of Saint King Tamar University of Patriarchate of Georgia, which has modern material and technical resources and is ensured with other necessary resources: classrooms equipped with modern equipment and inventory, the library (book fund and scientific electronic databases), resources of the Center for Research, Development and Innovation, etc. Memoranda on cooperation have been signed with various structures and successful organizations and program components will be implemented using all resources available to the University.

The institution has an appropriate infrastructure to implement the Bachelor's education program and to achieve the learning outcomes provided by the program: Well-equipped classrooms, the library space and book fund, the library with international electronic library network, academic staff workspace, administrative rooms, meeting rooms and conference halls, student spaces and recreation area, and a well-designed yard. In order to implement the practical component, the institution has concluded memoranda.

Program Structure/Curriculum

Academic Course	Code	EC TS	Volume of study activities in astronomical hours		Distribution of credits by semesters								The lecturer	Admission requirement
			Class room	Additional (or independent)	1	2	3	4	5	6	7	8		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Core courses of the specialty		173												
General and Medical Chemistry	B0915.1.1.01	4	36	64	4								Invited teacher Nana Nadaraya	
General and Medical Biology	B0915.1.1.02	4	36	64	4								Associate Professor Ketevan Shalashvili	
Medical Physics, Biophysics	B0915.1.1.03	4	36	64	4								Invited teacher Khatuna Chikvinidze	
Medical Biochemistry	B0915.1.1.04	4	36	64		4							Associate Professor Ketevan Shalashvili	B0915.1.1.01
Microbiology- Virology- Immunology	B0915.1.1.05	4	36	64				4					Invited teacher Darejan Chikviladze	B0915.1.1.03 B0915.1.1.04

Pharmacology	B0915.1.1.06	4	36	64				4						Invited teacher Nadezhda Mushkiashvili	B0915.1.1.04
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Fundamentals of Physical Medicine and Rehabilitation 1	B0915.1.1.07	3	36	39		3							Associate Professor Lali Kokaya	
Fundamentals of Physical Medicine and Rehabilitation 2	B0915.1.1.08	3	36	39		3							Associate Professor Lali Kokaya	B0915.1.1.07
Human Anatomy 1	B0915.1.1.09	3	36	39	3								Invited teacher Grigol Sulaberidze	
Human Anatomy 2	B0915.1.1.10	3	36	39		3							Invited teacher Grigol Sulaberidze	B0915.1.1.09
Human Physiology 1	B0915.1.1.11	3	36	39	3								Invited teacher Davit Chkhobadze	
Human Physiology 2	B0915.1.1.12	3	36	39		3							Invited teacher Davit Chkhobadze	B0915.1.1.11
General Surgery	B0915.1.1.13	3	36	39			3						Professor Giorgi Tsilosani	B0915.1.1.10 B0915.1.1.11
Private Surgery	B0915.1.1.14	3	36	39				3					Professor Giorgi Tsilosani	B0915.1.1.13
Infectious Diseases	B0915.1.1.15	3	36	39				3					Invited teacher Tamar Megrelishvili	B0915.1.1.16
Pathology	B0915.1.1.16	3	36	39			3						Invited teacher Dinara Kasradze	B0915.1.1.10 B0915.1.1.12 B0915.1.1.04
Internal Diseases	B0915.1.1.17	3	36	39				3					Associate Professor	

Propaedeutics													Lali Kokaya	
Therapy	B0915.1.1.18	3	36	39					3				Associate Professor Lali Kokaya	B0915.1.1.17
Fundamentals of Therapeutic Exercise	B0915.1.1.19	3	36	39					3				Invited teacher Eter Abaishvili	B0915.1.1.21 B0915.1.1.23
Work-load Physiology and Biochemistry 1	B0915.1.1.20	3	36	39			3						Invited teacher Davit Chkhobadze	B0915.1.1.12 B0915.1.1.04
Work-load Physiology and Biochemistry 2	B0915.1.1.21	3	36	39				3					Invited teacher Davit Chkhobadze	B0915.1.1.20
Dynamic Anatomy with Neuroanatomy 1	B0915.1.1.22	3	36	39			3						Invited teacher Grigol Sulaberidze	B0915.1.1.10 B0915.1.1.12
Dynamic Anatomy with Neuroanatomy 2	B0915.1.1.23	3	36	39				3					Invited teacher Grigol Sulaberidze	B0915.1.1.22
Pediatrics	B0915.1.1.24	3	36	39					3				Associate Professor Khatuna Melia	B0915.1.1.17
Physical Rehabilitation in a Disease Clinic 1	B0915.1.1.25	3	36	39					3				Associate Professor Lali Kokaya	B0915.1.1.17
Physical Rehabilitation in a Disease Clinic 2	B0915.1.1.26	3	36	39						3			Associate Professor Lali Kokaya	B0915.1.1.25

Therapeutic Massage 1	B0915.1.1.27	3	36	39					3				Invited teacher Eter Abaishvili	B0915.1.1.30
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Therapeutic Massage 2	B0915.1.1.28	3	36	39						3		Invited teacher Eter Abaishvili	B0915.1.1.27
Therapeutic Massage 3	B0915.1.1.29	3	36	39							3	Invited teacher Eter Abaishvili	B0915.1.1.28
General Fundamentals of Massage	B0915.1.1.30	3	36	39				3				Invited teacher Eter Abaishvili	B0915.1.1.07 B0915.1.1.09
Radiology 1.	B0915.1.1.31	3	30	45					3			Associate Professor Khatuna Melia	B0915.1.1.17
Radiology 2 -	B0915.1.1.32	3	30	45						3		Associate Professor Khatuna Melia	B0915.1.1.31
Endocrinology, Metabolism	B0915.1.1.33	3	30	45						3		Associate Professor Nana Gumbaridze	B0915.1.118
Traumatology, Orthopedics	B0915.1.1.34	3	30	45						3		Invited teacher Ramaz Aglemashvili	B0915.1.1.14
Biomechanics, Kinesiology 1	B0915.1.1.35	3	36	39		3						Invited teacher Khatuna Chikvinidze	
Biomechanics, Kinesiology 2	B0915.1.1.36	3	36	39			3					Invited teacher Khatuna Chikvinidze	B0915.1.1.35
Therapeutic Exercise (private part)	B0915.1.1.37	3	30	45						3		Invited teacher Eter Abaishvili	B0915.1.1.19

Preventive Medicine 1	B0915.1.1.38	3	36	39		3							Associate Professor Tamaz Gelovani	
Preventive	B0915.1.1.39		36	39			3						Associate Professor	B0915.1.1.38

Medicine 2		3										Tamaz Gelovani	
Toxicology	B0915.1.1.40	3	30	45						3		Invited teacher Manana Zhuruli	B0915.1.1.39
Sports Medicine 1	B0915.1.1.41	3	36	39						3		Invited teacher Marine Chkhikvishvili	B0915.1.1.26 B0915.1.1.37
Sports Medicine 2	B0915.1.1.42	3	36	39							3	Invited teacher Marine Chkhikvishvili	B0915.1.1.41
Physiotherapy, Balneology 1	B0915.1.1.43	3	30	45						3		Invited teacher Nana Kintsurashvili	B0915.1.1.26
Physiotherapy, Balneology 2	B0915.1.1.44	3	30	45							3	Invited teacher Nana Kintsurashvili	B0915.1.1.43
Adaptive Physical Education 1	B0915.1.1.45	3	36	39						3		Invited Teacher Teimuraz Mikiashvili	B0915.1.1.26
Adaptive Physical Education 1	B0915.1.1.46	3	36	39							3	Invited Teacher Teimuraz Mikiashvili	B0915.1.1.45
Manual Therapy	B0915.1.1.47	3	36	39						3		Invited teacher Alexandre Mchedlishvili	B0915.1.1.18
Acupressure Massage	B0915.1.1.48	3	36	39							3	Invited Teacher	B0915.1.1.18

												Alexandre Mchedlishvili	
Rehabilitation in Pediatrics	B0915.1.1.49	3	30	45							3	Associate Professor Lali Kokaya	B0915.1.1.24 B0915.1.1.18
Rehabilitation in Cardiology	B0915.1.1.50	3	30	45							3	Professor Gogi Chakhunashvili	B0915.1.1.08 B0915.1.1.18
Rehabilitation in Neurology	B0915.1.1.51	3	30	45							3	Invited teacher Donara Kevlishvili	B0915.1.1.18
Speech Therapy	B0915.1.1.52	3	30	45							3	Invited teacher Mzia Putkaradze	B0915.1.1.18
Defectology	B0915.1.1.53	3	30	45							3	Invited teacher Mzia Putkaradze	B0915.1.1.52
Practice 1	B0915.1.1.54	4	42	58							4	Invited Teacher Teimuraz Mikiashvili	B0915.1.1.29 B0915.1.1.26
Practice 2	B0915.1.1.55	4	42	58							4	Invited Teacher Teimuraz Mikiashvili	B0915.1.1.54
B) Elective Courses		21											
Pathology	0915.1.1.001	3	36	39			3					Invited teacher Dinara Kasradze	
Fundamentals of Traditional Medicine	0915.1.1.002	3	36	39				3				Invited teacher Marine Benidze	

Phytotherapy	0915 003	1	1	3	36	39									3			Invited teacher: Marine Benidze
Methodology of inclusive education.	0915 004	1	1	3	36	39			3									Invited teacher Khatuna Kobakhidze
History of Medicine	0915 005	1	1	3	36	39	3											Invited teacher Irine Bibileishvili
Eastern Medicine	0915 006	1	1	3	36	39				3								Invited teacher Khatuna Urushadze
Latin language, Medical terminology	0915 007	1	1	3	36	39	3											Invited teacher Nino Tsereteli
Medical psychology	0915 008	1	1	3	36	39			3									Associated professor Lana Sul Khanishvili
Psychiatry	0915 009	1	1	3	36	39									3			Invited teacher Marine Kuratashvili
Psychology of disabled persons	0915 010	1	1	3	36	39										3		Associated professor Lana Sul Khanishvili
Dietology Nutrition	0915 011	1	1	3	30	45										3		Associated professor Nana Gumbaridze

Otorhinolaringology	0915	1	1	3	30	45					3					Invited teacher Nakudashvili	
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Gynecology Reproduction	0915 1 1 013	3	30	45					3				Associate professor Akaki Bakradze	
Medical Genetics	0915 1 1 014	3	36	39		3							Associate professor Ketevan Shalashvili	
General or free components, research: A) Mandatory Courses		54 27												
Academic Writing	B0101	4	36	64				4					Invited teacher: Bella Saria	
Foreign language 1 (English)	B0102	4	36	64	4								Invited teacher Irine Menabde	
Foreign language 2 (English)	B0103	4	36	64		4							Invited teacher Irine Menabde	B0102
Foreign language 3 (English)	B0104	4	36	64			4						Invited teacher Irine Menabde	B0103
Information Technologies	B0105	3	36	39	3								Associate Professor Nana Gumbaridze	
Bioethics 1	B0106	4	36	64				4					Professor Archimandrite Adam	

Bioethics 2	B0107	4	36	64						4			Professor Archimandrite Adam	B0106
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B) Elective Courses		15												
Contemporary Georgian Literary Language	B0108	3	36	39	3								Invited teacher: Bella Saria	
Generative analysis of literature	B0109	3	36	39			3						Invited teacher Bella Saria	
Old Testament	B0110	3	36	39			3						Arch-priest Iakob (Ushikishvili)	
New Testament	B0111	3	36	39			3						Arch-priest Iakob Ushikishvili	
Introduction to Christian Doctrine	B0112	3	36	39		3							Arch-priest Iakob Ushikishvili	
History and Culture of Georgia 1	B0113	3	36	39	3								Prof. Zaza Tsursumia	
History and Culture of Georgia 2	B0114	3	36	39		3							language Zaza Tsursumia	B0113
Anthropology	B0115	3	36	39				3					Professor Archimandrite Adam	
Culture of Speech	B0116	3	36	39			3						Invited teacher	

**Map of the
program
objectives
and
learning
outcomes
Map of
outcomes**

Program objectives	Learning outcome 1	Learning outcome 2	Learning outcome 3	Learning outcome 4	Learning outcome 5	Learning outcome 6	Learning outcome 7	Learning outcome 8
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<p>In accordance with the modern standards of education, to form highly qualified, competitive specialists in the field of physical medicine and rehabilitation, who will know the basic scientific concepts of the humanities and pathology sciences on microbiological and immunological diagnostics. On the regularities of the influence of occupational</p>	<p>X</p>		<p>X</p>			<p>X</p>		
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factors on the health of the population.								
Get thorough and comprehensive knowledge: About the mechanisms of disease, infection, immune and hereditary diseases, basics of diagnosis and management of emergency and critical conditions, modern theories, principles, methods and means of physical medicine and rehabilitation. Methods of adaptation of the human body to physical activity, principles of nutrition of athletes, kinesio-correction measures and rehabilitation means	X	X		X			X	X
Training of a full member of the optimal result-oriented multidisciplinary medical team - Bachelor of Physical Medicine and Rehabilitation, Which, by modifying physical and cognitive function, activity, involvement, modification of personal or environmental factors, ensures the prevention of ongoing pathologies with disability at any age, diagnosing and rehabilitation management, Carrying out rehabilitation		X	X			X	X	X

activities aimed at improving functional capacity in case of acute or chronic condition;								
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Learning outcomes	Characteristics of learning outcomes	Note
Learning outcome 1	<p>The Bachelor of Physical Medicine and Rehabilitation will have the theoretical and practical knowledge and skills relevant to modern standards that include a critical understanding of theories and principles; Understanding of complex issues in the field, such as anatomical, physiological, pathological and physiological features of the human body and its constituent elements. Tissue structures of the body, metabolic processes in the human body, metabolism; Physiological and biochemical factors related to physical exercise and their impact on human health;</p> <p>Functional changes in the body during and after fatigue, ways and means of their recovery;</p> <p>Kinematic characteristics of motion and modern methods of analysis of individual motions.</p>	
Learning outcome 2	<p>The bachelor will be acquainted with modern theories, principles, methods and means of physical medicine and rehabilitation;</p> <p>Basic provisions of traumatology. General assessment of the traumatic condition and first aid for injury.</p> <p>General and sports hygiene norms and requirements; Types and peculiarities of physiotherapy, indications and contraindications for the appointment of physiotherapy procedures. Forms and types of massage, their importance for maintaining muscle tone, the impact of the massage mechanism on the body.</p>	

	<p>Methods of restoring and strengthening the health of athletes in conditions of intensive training and rest-recovery. Classification of therapeutic exercise with different signs and clinical and physiological significance of physical exercise on the human body;</p>	
<p>Learning outcome 3</p>	<p>Will know the current issues and peculiarities of the athlete's psychological training, analysis of mental processes, maintenance of psycho-physical forces - peculiarities of recovery. Individual strategies of adaptive physical education and sports training; Determining the diet of athletes and non-athletes, the basic principles of rational and balanced nutrition, methods of their evaluation. Will gain in-depth knowledge of the basics of physical medicine and general rehabilitation, electrodiagnostics and electrotherapy, physiotherapy, therapeutic modalities, massage, manual therapy, acupuncture, fitness, orthopedics and bioprosthesis, the basics of sports medicine</p>	
<p>Learning outcome 4</p>	<p>The bachelor will be able to define and successfully implement rehabilitation measures according to the types of sports and rehabilitation deadlines using the latest methods and approaches of physical medicine and rehabilitation; Determine methods of enhancing human health and developing physical properties, selecting medical rehabilitation tactics for various diseases and injuries; General assessment of the traumatic condition and selecting treatment tactics; Develop a first aid and prevention scheme for traumatic injuries based on medical history and analysis; Use the tools and methods needed to develop the physical characteristics of people with disabilities in different medical and age groups; Adjusting special loads according to the age, sexual, physical and functional abilities of adults and determining their intensity; Select healing physical exercises and evaluate results;</p>	

<p>Learning outcome 5</p>	<p>Based on the knowledge gained through the program, the bachelor can use innovative methods to determine the impact of physical exercise and sports on the human body, its psycho-physical capabilities and develop a special set of physical exercises.</p> <p>Develop an individual rehabilitation plan based on the needs of individuals with physical and cognitive disabilities;</p> <p>Knowledge and practice of various massage techniques; Proper determination of athletes' diet;</p> <p>Selection and application of individual recommendations for disease prevention, proper planning of preventive measures, timely and safe use of medical-rehabilitation means;</p> <p>Identify psychological and social problems and manage the situation within the competence.</p>	
<p>Learning outcome 6</p>	<p>Is able to collect and interpret the data characteristic to the field, as well as perform the analysis of the non-figurative data and situations using the standard and some distinctive methods, make a substantiated conclusion:</p> <p>Analysis, critical evaluation and conclusion of literary sources and information data. Defining the ways of problem-solving.</p> <p>Assess the situation and determine appropriate preventive measures; Analysis and evaluation of sports - rehabilitation and rehabilitation activities;</p> <p>Use proven methods appropriate to the situation and make competent conclusions when processing the results of laboratory and instrumental examinations;</p> <p>Based on the analysis of the dynamics of physical medicine and rehabilitation development and other indicators, to make reasoned conclusions in order to increase the efficiency of the rehabilitation-recovery process.</p> <p>Is able to find, analyze, interpret and synthesize information and data from various sources in order to make reasoned decisions;</p> <p>Ability to conclude laboratory-research procedures within the scope of competence and</p>	

	skills of making judgement.	
Learning outcome 7	<p>The bachelor can evaluate his / her learning process consistently and comprehensively, identify further learning needs; Develop motivation to acquire new knowledge as a result of evaluating and realizing the need for self-knowledge and skills; Planning your own learning process, determining the need for learning in a certain direction (master's, doctoral).</p> <p>Understands and takes responsibility for his/her own professional development and learning;</p> <p>Participation in the process of formation of values and striving for their establishment.</p>	
Learning outcome 8	<p>Understands the professional, ethical and legal norms in the field of physical medicine and rehabilitation, the basic principles of medical ethics, patients' rights, rights of the disables, principles of relations with colleagues, the principles of health law and implements them in daily activities, which leads to acting in accordance with the values inherent in professional activities in different situations, realizing the importance of social integration of people with disabilities.</p>	

The curriculum map of Bachelor's program: Physical medicine and rehabilitation.

1- Introduction, 2 - deepening, 3 -

strengthening

		Competence of the graduates of the bachelor's program "Public Healthcare"		
	Name of the academic course	Knowledge	Skill	Responsibility and Autonomy
1	General and Medical Chemistry	1	1	1
2	General and Medical Chemistry	1	1	1
3	Medical Physics Biophysics	1	1	1
4	Medical biochemistry	1	1	1
5	Microbiology- Virology- Immunology	1	2	1
6	Pharmacology	1	2	1
7	Basics of Physical Medicine and Rehabilitation 1	1	2	2
8	Basics of Physical Medicine and Rehabilitation 2	1	2	2
9	Human Anatomy 1	1	1	1
10	Human Anatomy 2	1	1	1
11	Human physiology 1	1	1	1
12	Human physiology 2	1	2	2

13	General Surgery	1	2	2
14	Private Surgery	2	2	2
15	Infectious Diseases	2	2	2
16	Pathology	2	2	2
17	Internal diseases propaedeutics	2	2	2
18	Therapy	2	2	2
19	Basics of therapeutic exercise	1	2	2
20	Load Physiology and Biochemistry 1	1	2	2
21	Load Physiology and Biochemistry 2	2	2	2
22	Dynamic anatomy with neuroanatomy 1	1	2	2
23	Dynamic anatomy with Neuroanatomy 2	2	2	2
24	Pediatrics	1	2	2
25	Physical rehabilitation in clinics of diseases 1	1	2	2
26	Physical rehabilitation in clinics of diseases 2	1	2	2
27	Healing massage 1	2	2	2
28	Healing massage 2	2	2	2
29	Healing massage 3	2	2	3
30	General Fundamentals of Massage	1	2	2
31	Radiology.	2	2	2

	Radiology 1			
32	Radiology 2.	2	2	2
33	Endocrinology Metabolism	2	2	2
34	Traumatology, Orthopedics	2	2	2
35	Biomechanics, Kinesiology 1	1	2	2
36	Biomechanics, Kinesiology 2	2	2	2
37	Therapeutic exercise (private part)	2	2	3
38	Preventive medicine 1			
39	Preventive medicine 2			
39	Toxicology.			
41	Sports Medicine 1	2	2	2
42	Sports Medicine 2	2	2	3
43	Physiotherapy, spa studies 1	2	2	2
44	Physiotherapy, spa studies 2	2	2	3
45	Adaptive physical training 1	2	2	3
46	Adaptive physical training 2	2	3	3
47	Manual therapy	2	2	2
48	Acupressure massage	2	2	2
49	Rehabilitation in pediatrics	2	3	
50	Rehabilitation in cardiology	2	3	3

51	Rehabilitation in neurology	2	3	3
52	Speech therapy	2	3	3
53	Defectology	2	3	3
54	Teaching practice 1	3	3	3
55	Teaching practice 2	3	3	3
	Elective Courses			
1	Pathology	1	1	2
2	Fundamentals of traditional medicine			
3	Phytotherapy	1	1	2
4	Methodology of inclusive education.			
5	History of Medicine	1	1	1
6	Eastern Medicine	1	1	1
7	Latin language, Medical terminology	1	1	-
8	Medical psychology	1	1	2
9	Psychiatry	1	1	2
10	Psychology of the disabled	1	1	2
11	Dietology	1	1	2
12	Otorhinolaryngology	1	1	2
13	Gynecology Reproduction	1	1	2
14	Medical Genetics	1	1	2
	General or/and			

	free components. research: A) Mandatory Courses			
17	Academic Writing	1	1	-
18	Foreign language 1 (English)	1	1	-
19	Foreign language 2 (English)	1	2	-
20	Foreign language 3 (English)	2	2	-
21	Information Technologies	1	1	1
22	Bioethics 1	1	1	2
23	Bioethics 2	1	1	2
	B) Elective Courses	1	1	-
24	Issues of normalization of modern Georgian literary language			
25	Generative analysis of literature	1	1	-
26	Old Testament	1	1	-

27	New Testament	1	1	-
28	Introduction to Christian Doctrine	1	1	-
29	History and Culture of Georgia 1	1	1	-
30	History and Culture of Georgia 2	1	2	-
31	Anthropology	1	2	-
32	Culture of Speech	1	1	-
33	Behaviorist psychology	1	2	-
34	Preparing and defending Bachelor's thesis	3	3	3

Programmes of the teaching courses (syllabuses)

Programmes of the teaching courses (syllabi) with attachment (see the attached CD-R)