

Name of the program: Physical Medicine and Rehabilitation

Bachelor Program

Program Supervisor – Professor Lela Aptsiauri

Program Scope: 240 credits

Awarded Qualification: Bachelor of Physical Medicine and Rehabilitation

Admission Requirements:

Admission to the Bachelor's Program in Physical Medicine and Rehabilitation is granted to individuals who hold a state-recognized document certifying the completion of general education or an equivalent qualification. Candidates must pass the Unified National Examinations and achieve a sufficient score to qualify for enrollment. Additionally, individuals specified under Article 52, Paragraph 3 of the Law of Georgia on Higher Education may be admitted based on the results of a university-organized examination assessing the applicant's proficiency in the Georgian language. This examination includes listening, reading comprehension and analysis, and speaking components. Applicants may also submit an official document certifying their proficiency in the Georgian language at the B1 level.

The admission of foreign citizens is conducted in accordance with the regulations established by Georgian legislation.

Language of instruction: Georgian

Program Objective

The objective of the educational program of the Bachelor's program corresponds to the University's mission and strategic priorities and is oriented toward the preparation of highly qualified, competent, competitive specialists with a high level of ethical responsibility in the field of Physical Therapy and Rehabilitation.

The program aims to form and develop in students the theoretical knowledge, practical skills, and professional values necessary for effective professional activity in the field of Physical Therapy and Rehabilitation. The program ensures students' preparation for clinical and practical activities based on modern scientific evidence, which implies a thorough mastery of the fundamental theories, concepts, and professional practices of the field and their practical application.

The program aims to prepare specialists who possess broad knowledge in the field of Physical Medicine and Rehabilitation, are able to critically understand the main theories and principles of the field, apply them in professional practice, and generalize the acquired knowledge taking into account modern scientific achievements and trends in the development of the field.

Within the framework of the program, students will study modern theories, principles, and methods for the restoration and improvement of human physical functions, including: approaches to restoring and improving the physical condition of persons with temporary or permanent special needs; mechanisms of adaptation of the human body to physical loads; the influence of physical and chemical factors on the human body, including that of athletes; principles of injury prevention and first aid in cases of sports injuries; methods of planning and managing the rehabilitation process; principles of rational nutrition for athletes; and modern approaches to the use of kinesiocorrective and rehabilitation measures.

The program promotes the development of professional ethics, social responsibility, and effective professional communication skills among students, ensuring their successful cooperation with various professional and social groups. The program also promotes the development of competencies necessary for graduates' critical thinking, self-reflection, and continuous professional development.

Learning Outcomes

1. Knowledge and Understanding

The graduate:

- Possesses broad knowledge in the field of Physical Medicine and Rehabilitation, which includes the main theories, principles, and modern methods of the field, including some of the latest aspects in Physical Therapy and Rehabilitation.
- Identifies and explains modern theories and principles of restoring and improving the physical condition of persons with temporary or permanent special needs.
- Distinguishes anatomical, physiological, and pathophysiological characteristics of the human body and its constituent systems and the processes of metabolism; explains the main mechanisms of metabolism and the organization and functions of tissue structures.
- Relates and explains physiological and biochemical processes associated with physical loads and evaluates their impact on human health and functional condition.
- Identifies functional changes occurring in the body during states of fatigue and explains the main mechanisms and means of recovery.
- Identifies and describes the basic principles of traumatology, evaluates general signs of traumatic conditions, and explains the principles of first aid in cases of injury.
- Relates and describes kinematic characteristics of movement and modern methods of movement analysis.
- Explains the impact of doping on the human body and sports performance and describes the main approaches for its detection.
- Distinguishes and characterizes the main types and methods of physiotherapy and explains indications and contraindications for physiotherapeutic procedures.
- Describes the principles of dietary regimes for healthy individuals and persons with various pathological conditions, considers the fundamentals of rational and balanced nutrition, and applies evaluation methods.
- Differentiates forms and types of massage, explains the importance of massage in maintaining/restoring muscle tone, and characterizes the mechanisms of its physiological effects.
- Classifies therapeutic exercises according to various criteria and generalizes the clinical and physiological significance of physical exercise for the human body.
- Evaluates human health status and explains the influence of physical loads on the development of physical qualities and functional capabilities.

2. Skills

The graduate:

- Determines and plans the application of physical medicine and rehabilitation methods considering the specifics of physical exercises and rehabilitation timelines and manages the respective rehabilitation process.
- Develops programs for the restoration and strengthening of human health and the development of physical abilities and selects individual and specialized rehabilitation tactics in cases of various diseases and traumatic injuries.
- Evaluates the patient's anamnesis, clinical data, and analyses; determines general characteristics of traumatic conditions; selects appropriate management tactics and, when necessary, ensures the provision of first medical aid.

- Uses modern means and methods of physical rehabilitation in various medical and age groups, including for the development of physical abilities of persons with disabilities.
- Develops individual rehabilitation plans for persons with disorders in physical and cognitive development, considering their functional condition and needs.
- Performs training, restorative, and hygienic massage in practice in accordance with professional standards.
- Evaluates the health status of representatives of various age, gender, and medical groups; applies modern methods and technologies for assessing the quality of health; and plans the timely and safe use of therapeutic and rehabilitation means.
- Based on anamnesis and clinical data, evaluates traumatic conditions and, if necessary, ensures the provision of first medical aid.
- Analyzes and evaluates clinical and functional data using standard and modern methods in order to solve complex and unforeseen professional problems.
- Evaluates results and formulates reasoned conclusions that take into account relevant social, scientific, and ethical aspects.
- Expresses and substantiates his/her professional position using appropriate argumentation.
- Participates in professional discussions with specialists and non-specialists on problems existing in the field of Physical Medicine and Rehabilitation and ways of solving them in Georgian and English.
- Conducts effective communication with various social groups, including individuals with communication difficulties.

Responsibility and Autonomy

- The graduate recognizes the necessity of continuous professional development and is able to determine and implement his/her own further learning needs.
- Ensures the conduct of development-oriented activities in complex, unpredictable learning and/or working environments and assumes responsibility.

Accordingly, the learning outcomes of the program ensure the competitiveness of graduates in the labor market and the opportunity to continue studies at the next level.

Program Structure

The undergraduate program is 4 years long and consists of eight semesters. The program spans 240 credits over the four years, with 30 credits per semester and 60 credits per year.

Of these:

- General mandatory courses: 29 credits
- Core mandatory courses: 69 credits
- Specialization mandatory courses: 129 credits (including specialization practice - 16 credits; bachelor thesis - 14 credits)

- Mandatory elective courses: 13 credits

1 credit = 25 hours

One academic year: 42 weeks

Semester duration: 21 weeks (including: teaching - 15 weeks; exam period - 4 weeks; additional exams - 2 weeks).

Knowledge Assessment System

In assessing the knowledge of students in the undergraduate educational program, University Geomedi LLC follows the European Credit Transfer and Accumulation System (ECTS); the "Law of Higher Education" of Georgia; and the assessment system defined by the "Rules for Calculating Credits for Higher Educational Programs" approved by the Minister of Education and Science of Georgia on January 5, 2007, Order No. 3. This system includes:

a) Five types of positive assessments:

- a.a) **(A) Excellent** – 91-100 points;
- a.b) **(B) Very Good** – 81-90 points;
- a.c) **(C) Good** – 71-80 points;
- a.d) **(D) Satisfactory** – 61-70 points;
- a.e) **(E) Sufficient** – 51-60 points.

b) Two types of negative assessments:

- b.a) **(FX) Did not Pass** – 41-50 points, meaning that the student needs to do more work and is allowed one additional attempt through independent work and retaking the exam.
- b.b) **(F) Failed** – 40 points or less, meaning the student's work is insufficient and they must retake the course/subject.

Student knowledge assessment is carried out using a 100-point system:

The semester assessment consists of two components – intermediate and final assessments. Each component has its own percentage weight in the overall assessment system, which is determined by the instructor (1) 70/30 or (2) 60/40. This means that in the first case, the intermediate assessment accounts for 70% of the final grade, and the final assessment accounts for 30%. In the second case, the intermediate assessment makes up 60% of the final grade, and the final assessment makes up 40%.

The intermediate assessment is divided into components (midterm exam, participation in seminars/practical classes, presentations, quizzes, situational tasks, essays, etc.). The percentage for each of these components is determined by the instructor, except for the midterm exam, which is a mandatory component of the intermediate assessment. In the (1) 70/30 case, the midterm exam accounts for 30 points, and in the (2) 60/40 case, it accounts for 20 points.

The minimum competency threshold for the intermediate assessment, which is a prerequisite for taking the final exam, is 50% of the intermediate assessment.

The final assessment is a necessary part of the semester evaluation. The minimum competency threshold for passing the final assessment is 50%+1. If the student's score ranges from 41 to 50 points, they are allowed one additional attempt through retaking the exam. If the student's score is less than 41 points, they must retake the course/subject. In cases where the student's intermediate assessment score is 51 points or higher, they are required to pass the final exam with a score above the minimum competency threshold.

The student has the right to take the additional exam in the same semester, no less than 5 days after the final exam results are announced.

• **In courses that involve OSCE (Objective Structured Clinical Examination)**, the final assessment consists of two components:

3. **Test** – There are 20 questions, with each question worth 1 point. Total – 20 points. The minimum competency threshold is **10 points**.

4. **OSCE (Objective Structured Clinical Examination)** – The student takes the exam in 5 active examination rooms, spending 4 minutes in each room. The maximum score per station is 4 points, for a total of 20 points. The minimum competency threshold is **11 points**.

Score ranking:

4 points – Demonstrates practical skills very well.

3 points – Demonstrates practical skills well.

2 points – Demonstrates practical skills satisfactorily.

1 point – Demonstrates practical skills with errors.

0 points – Unable to perform the task practically.

• **In courses that involve OSPE (Objective Structured Practical Examination), the final assessment consists of two components:**

1. **Test** – There are 20 questions, with each question worth 1 point. Total – 20 points. The minimum competency threshold is **10** points.

2. **OSPE (Objective Structured Practical Examination)** – The student takes the exam in 5 active examination rooms, spending 4 minutes in each room. The maximum score per station is 4 points, for a total of **20** points.

The minimum competency threshold is **11** points.

Score ranking:

4 points – Demonstrates practical skills very well.

3 points – Demonstrates practical skills well.

2 points – Demonstrates practical skills moderately.

1 point – Demonstrates practical skills with errors.

0 points – Unable to perform the task practically.

The OSCE exam is held in the university's rehabilitation clinic.

The OSPE exam is held in the university's simulation clinic.

In the case of a re-examination, the student retakes the component(s) of the final assessment in which they did not meet the minimum competency threshold.

Bachelor's Thesis Assessment

The bachelor's thesis is evaluated on a 100-point scale:

• Preliminary Review of the Bachelor's Thesis: 60 points (minimum competency threshold: 30 points)

• Public Defense of the Bachelor's Thesis: 40 points (minimum competency threshold: 30 points)

The final score for the bachelor's thesis is calculated as the arithmetic average of the scores given by the committee members.

The Preliminary Review of the Bachelor's Thesis (held in the 18th week) is evaluated out of 60 points according to the following criteria:

- Novelty and relevance of the topic – 20 points (minimum competency threshold – 10 points)
- Comprehensively identified relevant literature sources and their systematization – 10 points (minimum competency threshold – 5 points)
- Ability to study and present materials related to the research issue – 10 points (minimum competency threshold – 5 points)
- Ability to identify the problem, conduct research and analysis, and maintain logical reasoning – 10 points (minimum competency threshold – 5 points)

- Technical, stylistic, and grammatical correctness of the thesis – 10 points (minimum competency threshold – 5 points)

The minimum competency threshold for the preliminary defense of the bachelor's thesis is set at 30 points.

Public Defense of the Bachelor's Thesis

The public defense of the bachelor's thesis (held in the 20th week) is evaluated out of 40 points according to the following criteria:

- Structure of the presented thesis – 10 points (minimum competency threshold – 5 points)
- Verbal aspect of the presentation – 10 points (minimum competency threshold – 5 points)
- Technical aspect of the presentation – 5 points (minimum competency threshold – 2 points)
- Reasoning and responses to questions and remarks – 15 points (minimum competency threshold – 8 points)

The minimum competency threshold for the public defense of the bachelor's thesis is set at 21 points.

The bachelor's thesis will be considered **successfully completed** if the student accumulates 51 or more points during the evaluation.

If the thesis score is **41-50 points**, the student is allowed to retake the public defense once during the same semester, provided the retake occurs **no later than 5 days** after the announcement of the public defense results.

Employment Field

The possible employment areas for graduates of the Faculty of Physical Medicine and Rehabilitation include public and private sectors, sports federations, sports, wellness, and fitness clubs, as well as any healthcare institutions.