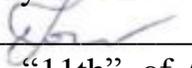


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Federal State Budget Educational Institution  
of Higher Education  
Pacific State Medical University  
of the Ministry of Health of the Russian Federation

APPROVED BY

Head of the Department  
of Physical Education and Sports  
 / Kaerova E.V. /  
"11th" of April 2025

**SUBJECT GUIDE FOR TEACHERS AND STUDENTS FOR**

**Б1.О.41 Physical education and sports**

(Name of discipline)

**Specialty**

**31.05.01 General Medicine  
for international students (in English)**

(code, name)

**Degree**

Specialist's degree

**Profile**

02 "Healthcare"

(in the field of providing primary health care to the  
population in medical organizations: polyclinics,  
outpatient clinics, inpatient/outpatient facilities of  
the municipal health care system)

**Mode of study**

**Full-time**

**Period of mastering the BEP**

**6 years**

(nominal length of study)

**Department**

of Physical Education and Sports

Subject guide for teachers and students for **Б1.О.41 Physical education and sports** is based on:

- 1) Federal State Educational Standard of Higher Education for the specialty approved by the Order No. 988 of Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020.
- 2) Changes that are made to the Federal State Educational Standard of Higher Education by the order of Ministry of Science and Higher Education of the Russian Federation No. 208, dated February 27, 2023.
- 3) Curriculum for the 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), approved by the Academic Council of FSBEI HE PSMU of the Ministry of Health of Russia, Report No. 8/24-25 dated March 31, 2025.

Subject guide for teachers and students for the discipline were developed by the writing team of the department of Physical Education and Sports of the FSBEI HE PSMU of the Ministry of Health of Russia, under the guidance of the head of the department Kaerova E.V., Candidate of Pedagogical Sciences.

**Developed by:**

	Candidate of Pedagogical Sciences, Associate Professor	
Head of Department		Kaerova E.V.
Assistant Professor	-	Shestyora A.A.
Assistant Professor	-	Stepanova I.S.
Assistant Professor	-	Tkach O.Yu.

## 1. GENERAL PROVISIONS

Subject guide for **B1.O.41 Physical education and sports** is a set of recommendations and explanations that facilitate to optimal organization of mastering this discipline.

Regular analysis of lecture materials and work with end-of-the-text questions are necessary for better understanding of the material and systematization of knowledge of **B1.O.41 Physical education and sports**. Particular attention should be paid to emerging questions, confusing terms, and conflicts of points of view during the independent review of the lecture material. If necessary, a student should contact the teacher for advice. Lecture material streamlines students' thinking, while practical classes provide deeper insight into the material of the discipline.

Special attention should be paid to the content of the main provisions and conclusions, explanation of phenomena and facts, and clarification of the practical application of theoretic aspects of topic when preparing for a practical class. During this process students should aim to understand and remember the main provisions of the material under consideration, examples provided, as well as understand the illustrative material.

Collections of assessment tools are used to organize independent study of topics (questions) of the discipline.

Independent work of students is facilitated by the following:

1. availability and accessibility of the necessary educational and reference material;
2. a system of regular quality control of completed independent work;
3. availability of teacher's advice.

Subject guides for self-study are presented as literary sources. Subject guides for independent work of students include a list of library resources of the educational institution and other materials accessible to students.

Independent work is a type of in-person extracurricular work of teachers and students of **B1.O.41 Physical education and sports**. Control of independent work is conducted by the leading teacher. Evaluation of independent work results is taken into account when conducting interim examination of students throughout the **B1.O.41 Physical education and sports** course.

Continuous assessment during the **B1.O.41 Physical education and sports** course is implemented in order to check indicators of achieving competencies, to stimulate students' academic work, and improve methods of mastering new knowledge. Continuous assessment during the **B1.O.41 Physical education and sports** course is conducted during the semester to assess all types and sections of the academic discipline that encompass the competencies developed by the discipline: in-person work, practical skills demonstration, creative assignments, tests, working with case studies. Continuous assessment of students' knowledge and results of their preparation for practical classes is conducted during every class session.

Interim assessment aims to determine the level of mastery of competency indicators. It is conducted in the test format after the student has mastered all sections of **B1.O.41 Physical education and sports** and takes into account learning outcomes for all types of student work over the entire period of mastering the **B1.O.41 Physical education and sports** course.

Time allotted for interim assessment is indicated in the schedule.

Assignments given during practical classes, as well as assignments aimed to prepare students for continuous and interim assessment, are included in the collection of assessment tools for **B1.O.41 Physical education and sports**. If necessary, students should contact the teacher for advice. It is necessary to thoroughly think over questions that need clarification before seeking teacher's advice.

## 2. SUBJECT GUIDES FOR LECTURE CLASSES

Table 1. Subject Guides for **Б1.О.41 Physical education and sports Lectures**

<b>Topic No.1 Physical education and sports in Russia. IT in physical education and sports. Digital transformation strategy in physical education and sports in Russia</b>	
Duration of the lecture (in academic hours):	2
<p>Purpose of the lecture:</p> <ol style="list-style-type: none"> <li>1. tell students about lifeforms on Earth, properties of the living matter, cell structure and function as a basic living system, functions of individual cell components, processes of cell replication and adaptation to the environment;</li> <li>2. define relevant terminology: life, chromosomes, karyotype and ideogram, mitosis, meiosis, gametogenesis, fertilization;</li> <li>3. examine the methods of identifying the stages of mitosis, meiosis, gametogenesis, and fertilization process.</li> </ol>	
<p>Lecture plan, order of presentation of its sections:</p> <ol style="list-style-type: none"> <li>1. Basic Concepts of Physical Culture and Sport.</li> <li>2. Means and Resources of Physical Culture and Sport.</li> <li>3. Social Functions of Physical Culture and Sport. Formation of Individual Physical Culture.</li> <li>4. Physical Culture within the Structure of Professional Education.</li> <li>5. Fundamentals of Legislation in the Field of Physical Culture and Sport of the Russian Federation</li> </ol>	
<p>Recommended reading:</p> <ol style="list-style-type: none"> <li>1. Стриханов, М. Н. Физическая культура и спорт в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва: Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <a href="https://urait.ru/bcode/564215">https://urait.ru/bcode/564215</a></li> <li>2. Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физической культуры: учебное пособие для вузов / Г. Н. Германов. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 224 с. — (Высшее образование). — ISBN 978-5-534-04492-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <a href="https://urait.ru/bcode/472703">https://urait.ru/bcode/472703</a> (дата обращения: 30.07.2023).</li> <li>3. Письменский, И. А. Физическая культура : учебник для вузов / И. А. Письменский, Ю. Н. Аллянов. — Москва: Издательство Юрайт, 2025. — 450 с. — (Высшее образование). — ISBN 978-5-534-14056-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <a href="https://urait.ru/bcode/560410">https://urait.ru/bcode/560410</a> (дата обращения: 29.05.2025).</li> <li>4. Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 599 с. — (Высшее образование). — ISBN 978-5-534-12033-2. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <a href="https://urait.ru/bcode/516434">https://urait.ru/bcode/516434</a> (дата обращения: 30.07.2023).</li> <li>5. Самостоятельная работа студента по физической культуре: учебник для вузов / под редакцией [сайт]. — URL: <a href="https://urait.ru/bcode/566502">https://urait.ru/bcode/566502</a> (дата обращения: 29.05.2025)</li> </ol>	

## 3. SUBJECT GUIDES FOR PRACTICAL CLASSES

Table 2. Subject Guides for Practical **Б1.О.41 Physical education and sports Classes**

<b>Topic No.1 Material- and Method-Based Health-Improvement Technologies in Physical Education. Health-Improvement Technologies Using Graded Walking and Running</b>	
Duration of the practical class (in academic hours):	4

Purpose of the practical class:

1. reveal the practical significance of regulated health walking and running in the system of preparation for professional activity, to foster motivation and activate the cognitive activity of students for increasing their level of physical development and general functional fitness of the body;
2. reinforce the acquired knowledge on the methodology of creating an individual program using regulated health walking and running;
3. develop the ability to design individual health programs considering gender, age, and health status;
4. cultivate the skills for creating individual programs of physical self-improvement using regulated walking and running and to teach their creative application in professional activity.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher during a training session\*\* involves the preparation of an individual 4-week program. This program may include, for example, cardiovascular system adaptation, increasing continuous running time, a training regimen: frequency (3-4 times a week), location (park, stadium). Dosage of the load for each week: the ratio of walking to running (e.g., according to a scheme of 5 minutes walking + 1 minute running, repeated 4 times), total training time, target heart rate (e.g., 120-140 bpm for beginners). A plan for warm-up and cool-down, and the filling out of a «Self-control diary» with subsequent analysis. Work with literature is considered a mandatory type of independent work, aimed at studying: the principles of recreational running and walking (gradualness, consistency, adequacy), safety techniques, methods for controlling intensity (calculating individual heart rate zones using the Karvonen formula, the talk test).

Methods of evaluation of acquired knowledge and skills: checking the "Self-monitoring log" and demonstrating general aerobic endurance in specific exercises of a natural cyclic structure.

Recommended reading:

1. Никитушкин, В. Г. Оздоровительные технологии в системе физического воспитания: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/563115> (дата обращения: 29.05.2025)
2. Матвеева, Н. А. Оздоровительный бег: учебное пособие / Н. А. Матвеева, Н. В. Васильева. — Режим доступа: для авториз. пользователей.
3. Радовицкая, Е. В. Методические аспекты использования оздоровительной ходьбы и оздоровительного бега / Е. В. Радовицкая, С. А. Романченко, Т. В. Сизова. — Санкт-Петербург: ПГУПС, 2022. — 31 с. — ISBN 978-5-7641-1798-0. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/264725> (дата обращения: 29.07.2023). — Режим доступа: для авториз. пользователей.
4. Орлова, О. В. Оздоровительный бег как форма самостоятельных занятий: учебное пособие / О. В. Орлова. — Санкт-Петербург: ПГУПС, 2023. — 31 с. — ISBN 978-5-7641-1798-0. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/264725> (дата обращения: 29.07.2023). — Режим доступа: для авториз. пользователей.

## **Topic No.2 Main Physical Qualities. Endurance. Methods of Development and Control, Using Mobile Applications**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical significance of developing general endurance as the ability to withstand physical fatigue during muscular activity within the system of preparation for professional work, to foster motivation, and to activate the cognitive activity of students for enhancing the level of physical development and overall functional fitness of the body;
2. consolidate knowledge on using the means and methods for designing an individual program

3. for developing and monitoring general (aerobic) endurance, including the application of mobile applications;
4. during the discussion, outline the main means, methods, and techniques for designing an individual endurance development program, taking into account physical fitness and health status, and assess the level of endurance development;
5. develop the skills to design individual programs for general endurance development, the ability to determine endurance levels, and apply this knowledge creatively in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

#### Independent work of the student:

Independent work of a student under the supervision of a teacher during a training session involves the preparation and demonstration of a creative assignment in the form of an individual aerobic-strength complex (e.g., circuit or interval training). This complex should be aimed at developing general and strength endurance and requires justification for the choice of exercises, duration of work/rest periods, and target intensity zones (e.g., based on heart rate or the RPE scale). Maintaining and analyzing a «Training Load Diary» is required: filling out a special section dedicated to tracking the dynamics of endurance development. The diary should include: load parameters (type, duration, intensity by heart rate), subjective sensations (shortness of breath, fatigue, readiness for exertion), recovery indicators (morning heart rate, sleep quality), and the results of periodic control tests. Subsequent analysis of this data is used to adjust the individual program.

Work with literature is considered a mandatory type of independent work, aimed at studying: the physiological mechanisms of developing aerobic and anaerobic endurance, modern methods of intensity control (including the use of fitness gadgets), and the specifics of load dosing for individuals with different fitness levels and health conditions (within the framework of prevention and an adaptive approach).

Methods of evaluation of acquired knowledge and skills: checking the "Self-monitoring log" and demonstrating a set of exercises aimed at developing endurance

#### Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).
2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. <https://urait.ru/bcode/564215>
3. Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физ. культуры: учебник для вузов / Г. Н. Германов. — Москва: Издательство Юрайт, 2023. — 128 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/472703> (дата обращения: 30.07.2023).
4. Письменский, И. А. Физическая культура: учебник для вузов / И. А. Письменский. — Москва: Издательство Юрайт, 2025. — 128 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560410> (дата обращения: 29.05.2025).
5. Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — Москва: Издательство Юрайт, 2023. — 784 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516434> (дата обращения: 30.07.2023).

**Topic No.3 Material- and Method-Based Health-Improvement Technologies in Physical Education. Health-Improvement Technologies Using Movement-Oriented Games and Sports**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical significance of using mobile and sports games within the system of preparation for professional activity, to foster motivation and activate the cognitive activity of students for increasing physical activity, developing moral and volitional qualities, and enhancing the level of physical development and overall functional fitness of the body;
2. consolidate acquired knowledge on the methodology of designing individual programs using mobile and sports games;
2. develop the ability to design individual health programs, considering gender, age, and health status, using mobile and sports games;
3. develop the skills for creating individual programs of physical self-improvement using mobile and sports games and to teach their creative application in professional activity.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher during a training session involves the preparation of a creative assignment in the form of a mobile game of various orientations for their study group, intended for the warm-up or main part of the session (10-15 minutes). This is based on mobile or simplified sports games (for example, «Pioneerball» «Dodgeball» «Shootout» mini-football/basketball with simplified rules). It also involves the real-time monitoring of physical load: measuring and analyzing heart rate (HR) in oneself and participants before, during, and after the game to understand the load level; observing and analyzing the development in players of qualities such as speed, agility, coordination, and accuracy; filling out the “Self-monitoring log” with subsequent analysis.

Work with literature is considered a type of independent work, aimed at studying: the methodology for teaching the rules and tactics of basic sports games; the role of play activities in developing physical and social qualities; the main principles of ensuring safety during games; and options for modifying popular games for different conditions and goals.

Methods of evaluation of acquired knowledge and skills:

Methods of control of acquired knowledge and skills: checking the “Self-monitoring log” to characterize outdoor games.

Recommended reading:

Спортивные игры: правила, тактика, техника: учебное пособие для среднего профессионального образования / Е. В. Конеева [и др.]; под общей редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 322 с. — (Профессиональное образование). — ISBN 978-5-534-13046-1. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/517443> (дата обращения: 29.07.2023).

Алхасов, Д. С. Базовые и новые виды физкультурно-спортивной деятельности с методикой преподавания: спортивные игры: учебник для вузов / Д. С. Алхасов, А. К. Пономарев. — Москва: Издательство Юрайт, 2025. — 313 с. — (Высшее образование). — ISBN 978-5-534-14409-3. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567942> (дата обращения: 29.05.2025)

Готовцев, Е. В. Национальные виды спорта и игры. Лапта: учебник для вузов / Е. В. Готовцев, Г. Н. Германов, И. В. Машошина. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 394 с. — (Высшее образование). — ISBN 978-5-534-04739-4. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/557046> (дата обращения: 29.05.2025).

## Topic No.4 Main Physical Qualities. Agility. Methods of Development and Control

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical importance of developing high-speed abilities that ensure the performance of motor actions in the minimum period of time for these conditions in the system of preparation for professional activity; to form motivation and activate the cognitive activity of students
2. consolidate acquired knowledge of the forms of manifestation of speed abilities (speed of reaction, frequency of movements, speed of single movement, speed of holistic actions), as well as about the means, methods and methodology of drawing up an individual program for the development and control of speed abilities, including the use of mobile applications;
3. during the discussion, outline the main means, methods and methodology for drawing up an individual program for the development of speed abilities, taking into account physical fitness and health status, as well as determine the level of development of speed abilities;
4. develop the skills of drawing up individual programs for the development of speed abilities, to master the methods of determining the level of development of speed abilities through control exercises (tests) and creatively apply the acquired knowledge in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher in a classroom involves the preparation of a creative task in the form of a set of exercises aimed at developing speed and current control, assessing physical fitness, assessing functional status, filling out a “Self-monitoring log” with subsequent analysis. Working with literature is considered as a kind of independent work.

Methods of control of acquired knowledge and skills: checking the “Self-monitoring log” demonstration of a set of exercises

Recommended reading:

Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).

Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва: Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>

Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физической культуры: учебное пособие для вузов / Г. Н. Германов. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 224 с. — (Высшее образование). — ISBN 978-5-534-04492-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/472703> (дата обращения: 30.07.2023).

Письменский, И. А. Физическая культура: учебник для вузов / И. А. Письменский, Ю. Н. Аллянов. — Москва: Издательство Юрайт, 2025. — 450 с. — (Высшее образование). — ISBN 978-5-534-14056-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560410> (дата обращения: 29.05.2025).

Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 599 с. — (Высшее образование). — ISBN 978-5-534-12033-2. — Текст: электронный //

Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516434> (дата обращения: 30.07.2023).784 (дата обращения: 29.07.2023).

**Topic No.5 Control and Self-Control. Physical Condition (Fitness) Assessment. IT Aimed at Control and Self-Control of Physical Condition (Fitness)**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. To reveal the practical importance of assessing one's own physical condition and using digital technologies (computer monitoring systems, smart watches, scales, fitness trackers, mobile applications and other tools) to monitor and self-monitor physical fitness in the professional training system. To motivate and enhance the cognitive activity of students, contributing to the development of self-management skills for their health and physical development;
2. introduce students to modern digital technologies and tools for assessing and monitoring physical condition, including computer monitoring systems, wearable devices, mobile applications and smart scales;
3. develop skills of using digital devices and software to collect, analyze, and interpret data on physical condition and fitness;
4. develop the ability to assess physical condition, taking into account gender, age and health status;
5. develop the skills of creating individual physical self-improvement programs based on the results of physical condition assessment using digital technologies.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher in a classroom involves the preparation of a creative task in the form of an assessment of physical condition and ongoing monitoring, filling out a “Self-monitoring log” with subsequent analysis. Working with literature is considered as a kind of independent work

Methods of control of acquired knowledge and skills: checking the “Self-monitoring log” demonstration of a set of exercises

Recommended reading:

Рубанович, В. Б. Врачебно-педагогический контроль при занятиях физической культурой: учебное пособие / В. Б. Рубанович. — 3-е изд., испр, и доп. — Москва: Издательство Юрайт, 2023. — 253 с. — (Высшее образование). — ISBN 978-5-534-07030-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/513484> (дата обращения: 29.07.2023).

Система контроля уровня физического развития и физической подготовленности для комплексной реабилитации и социальной интеграции лиц с отклонениями в состоянии здоровья: учебное пособие для вузов / Т. П. Бегидова [и др.]; под общей редакцией Т. П. Бегидовой. — 2-е изд., перераб, и доп. — Москва: Издательство Юрайт, 2023. — 87 с. — (Высшее образование). — ISBN 978-5-534-14809-1. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/520331> (дата обращения: 29.07.2023).

**Topic No.6 Main Physical Qualities. Dexterity. Methods of Development and Control**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. ensure the rational development of new motor actions and the successful solution of motor tasks in changing conditions, in the system of preparation for professional activity; to form motivation and activate the cognitive activity of students;
2. consolidate acquired knowledge of the means, methods and methodological approaches to the education of dexterity (motor and coordination abilities), as well as the preparation of an individual program for the development and control of these abilities;
3. during the discussion, outline the main means, methods and methodology of drawing up an individual program for the development of motor coordination abilities, taking into account age characteristics, as well as to determine the level of their development;
4. develop skills in drawing up individual dexterity development programs, master methods for determining the level of development of motor and coordination abilities through control exercises (tests) and creatively apply this knowledge in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher in an educational lesson involves the preparation of a creative task, the study of means and methods of dexterity education – the ability to accurately perform movements, the accuracy of differentiating power, temporal and spatial parameters; the method of «contrasting tasks»; methodological techniques for improving static and dynamic balance, etc., photo and video materials, filling out a «Self-monitoring log” with subsequent analysis. Working with literature is considered as a kind of independent work.

Methods of control of acquired knowledge and skills: checking the “Self-monitoring log” demonstration of a set of exercises

Recommended reading:

Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).

Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва: Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>

Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физической культуры: учебное пособие для вузов / Г. Н. Германов. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 224 с. — (Высшее образование). — ISBN 978-5-534-04492-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/472703> (дата обращения: 30.07.2023).

Письменский, И. А. Физическая культура: учебник для вузов / И. А. Письменский, Ю. Н. Аллянов. — Москва: Издательство Юрайт, 2025. — 450 с. — (Высшее образование). — ISBN 978-5-534-14056-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560410> (дата обращения: 29.05.2025).

Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 599 с. — (Высшее образование). — ISBN 978-5-534-12033-2. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516434> (дата обращения: 30.07.2023).784 (дата обращения: 29.07.2023).

**Topic No.7 Material- and Method-Based Health-Improvement Technologies in Physical Education. Health-Improvement Technologies Using Respiratory Gymnastics (Breathing Exercises)**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical significance of using various methods of respiratory gymnastics (Strelnikova, Buteyko, yoga breathing, etc.) for relaxation, stress relief, increasing respiratory volume, vital lung capacity and general functional fitness of the body in the system of preparation for professional activity; to form motivation and activate cognitive activity of students;
2. consolidate acquired knowledge on the methodology of creating an individual program using breathing exercises for relaxation and stress relief;
3. develop the skills to develop individual wellness programs based on gender, age and health status;
4. develop the skills of creating individual physical self-education programs using breathing exercises and to teach how to creatively apply them in professional activities

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher in a training session involves the preparation of a creative task in the form of a complex of breathing exercises for relaxation, stress relief (Strelnikova, Buteyko, yoga breathing, etc.) and ongoing monitoring, assessment of physical fitness, assessment of functional condition, filling out a «Self-monitoring log» with subsequent analysis. Working with literature is considered as a kind of independent work.

Methods of control of acquired knowledge and skills: checking the «Self-monitoring log» , give a description of breathing exercises, demonstration of a set of exercises

Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).
2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва: Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>
3. Дыхательная гимнастика [Текст]: учеб. пособие / И.В. Папина. – Липецк: Изд-во Липецкого Государственного технического университета, 2017 – 65 с.
4. Дыхательные гимнастики в оздоровительной физической культуре: методические рекомендации Кривцун В.П., Кривцун-Левшина – Витебск:ВГУ им. П.М. Машерова, 2021.- 48с.

**Topic No.8 Material- and Method-Based Health-Improvement Technologies in Physical Education. Health-Improvement Technologies Using Fitness Workouts**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical importance of using health-improving fitness technologies in the system of preparation for professional activity, to form motivation and activate cognitive activity of students
2. consolidate acquired knowledge of the principles of fitness training and the use of mobile applications for monitoring and planning workouts;
3. during the discussion, outline the main means, methods and principles of fitness training in the preparation of individual programs, taking into account physical fitness and health status;
4. develop the skills of creating individual programs using the principles of fitness training to improve physical fitness and creatively apply them in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

The student's independent work under the supervision of a teacher in a training session includes the preparation of a creative task using fitness technologies adapted for various purposes, such as the development of stretching, flexibility, strength and cardio training. As part of the work, the student performs ongoing monitoring and assessment of his physical fitness and the functional state of the body, keeps a «Self-monitoring log» with subsequent analysis of the results. Working with literature is considered as an important type of independent activity.

Methods of control of acquired knowledge and skills: checking the «Self-monitoring log» , demonstration of a set of exercises

Recommended reading:

1. Физкультурно-оздоровительные технологии: учебник для вузов / В. Л. Кондаков, А. А. Горелов, О. Г. Румба, Е. Н. Копейкина. — Москва: Издательство Юрайт, 2025. — 334 с. — (Высшее образование). — ISBN 978-5-534-13599-2. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567455> (дата обращения: 29.05.2025).
2. Чепиков, Е. М. Атлетическая гимнастика: учебник для вузов / Е. М. Чепиков. — 3-е изд. — Москва: Издательство Юрайт, 2025. — 179 с. — (Высшее образование). — ISBN 978-5-534-11089-0. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/565925> (дата обращения: 29.05.2025).
3. Силовые фитнес – технологии: учебно-методическое пособие / Е. Н. Чернышева, А. Е. Эрастов, Е. Н. Карасева [и др.]. — Великие Луки: Великолукская ГСХА, 2022. — 173 с. — ISBN 978-5-8047-0113-1. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/302531> (дата обращения: 29.07.2023). — Режим доступа: для авториз. пользователей.
4. Булгакова, О. В. Фитнес-аэробика: учебное пособие / О. В. Булгакова, Н. А. Брюханова. — Красноярск: СФУ, 2019. — 112 с. — ISBN 978-5-7638-4017-9. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/157655> (дата обращения: 29.07.2023). — Режим доступа: для авториз. пользователей.
5. Гапоненко, А. Ю. Фитнес: учебно-методическое пособие / А. Ю. Гапоненко, Т. А. Михайлова, Н. С. Рыжова. — Кемерово: КемГУ, 2024. — 171 с. — ISBN 978-5-8353-3163-5. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/451799> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
6. Михайлов, Н. Г. Методика обучения физической культуре. Аэробика: учебник для вузов / Н. Г. Михайлов, Э. И. Михайлова, Е. Б. Деревлёва. — 2-е изд., испр. и доп. — Москва: Издательство Юрайт, 2025. — 138 с. — (Высшее образование). — ISBN 978-5-534-07225-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/563138> (дата обращения: 29.05.2025).
7. Чернышова, Е. Н. Оздоровительный фитнес: учебно-методическое пособие / Е. Н.

Чернышова, Е. Н. Карасева. — Елец: ЕГУ им. И.А. Бунина, 2023. — 140 с. — ISBN 978-5-00151-355-1. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/393401> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.

### **Topic No.9 Main Physical Qualities. Flexibility. Methods of Development and Control, Using Mobile Applications**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical importance of using health-improving fitness technologies in the system of preparation for professional activity, to form motivation and activate cognitive activity of students in mastering methods of flexibility development;
2. consolidate acquired knowledge of the methodology of flexibility development and master control exercises to determine the level of flexibility;
3. develop the skills of creating individual programs using flexibility exercises aimed at relaxing, stretching and increasing joint mobility, as well as to teach how to creatively apply these programs in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

The student's independent work under the supervision of a teacher in a classroom includes the preparation of a creative task in the form of a set of stretching exercises (developing flexibility, joint mobility). In the process of work, the student carries out ongoing monitoring and determines the level of flexibility development using special control exercises. The results are recorded in the «Self-monitoring log» for subsequent analysis and correction of the training process. Working with specialized literature is considered as an important type of independent activity, contributing to the deepening of theoretical knowledge and improving the quality of practical skills.

Methods of control of acquired knowledge and skills: checking the «Self-monitoring log» , demonstration of a set of exercises

Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).
2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва : Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>
3. Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физической культуры: учебное пособие для вузов / Г. Н. Германов. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 224 с. — (Высшее образование). — ISBN 978-5-534-04492-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/472703> (дата обращения: 30.07.2023).
4. Письменский, И. А. Физическая культура: учебник для вузов / И. А. Письменский, Ю. Н. Аллянов. — Москва: Издательство Юрайт, 2025. — 450 с. — (Высшее образование). — ISBN 978-5-534-14056-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560410> (дата обращения: 30.07.2023).

29.05.2025).

5. Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 599 с. — (Высшее образование). — ISBN 978-5-534-12033-2. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516434> (дата обращения: 30.07.2023).784 (дата обращения: 29.07.2023).

### **Topic No.10 Traditional Asian Health-Improvement Systems**

Duration of the practical class (in academic hours):

Purpose of the practical class:

1. reveal the practical significance of Oriental systems as an integrated approach to health promotion based on the harmonization of the physical, spiritual and psycho-emotional state of a person in the system of preparation for professional activity; to motivate and activate the cognitive activity of students using the wellness practices of Eastern traditions such as Chinese gymnastics, yoga, taijiquan and qigong;
2. consolidate acquired knowledge of the basic principles and techniques of oriental wellness systems, including Chinese gymnastics, yoga and other practices;
3. develop the skills of creating individual programs using relaxation gymnastics based on the Chinese systems of taijiquan and qigong, Wushu gymnastics, yoga and other oriental practices, as well as to teach how to creatively apply these programs in professional activities.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

The student's independent work under the supervision of a teacher in a training session includes the preparation of a creative task in the form of a set of exercises using relaxation gymnastics based on eastern systems — taijiquan, qigong, wushu gymnastics, yoga and other practices. In the process of work, the student keeps a “Self-monitoring log”, recording the results and sensations, followed by an analysis of the effectiveness of the exercises performed. Working with specialized literature is considered as an important type of independent activity, contributing to the deepening of theoretical knowledge and the improvement of practical skills.

Methods of control of acquired knowledge and skills: checking the «Self-monitoring log” , demonstration of the chosen practice

Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).
2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва : Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>
3. Германов, Г. Н. Двигательные способности и физические качества. Разделы теории физической культуры: учебное пособие для вузов / Г. Н. Германов. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2025. — 224 с. — (Высшее образование). — ISBN 978-5-534-04492-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/472703> (дата обращения: 30.07.2023).
4. Письменский, И. А. Физическая культура: учебник для вузов / И. А. Письменский, Ю. Н. Аллянов. — Москва: Издательство Юрайт, 2025. — 450 с. — (Высшее

образование). — ISBN 978-5-534-14056-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560410> (дата обращения: 29.05.2025).

5. Физическая культура: учебное пособие для вузов / Е. В. Конеева [и др.]; под редакцией Е. В. Конеевой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 599 с. — (Высшее образование). — ISBN 978-5-534-12033-2. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516434> (дата обращения: 30.07.2023).784 (дата обращения: 29.07.2023).

### **Topic No.11 Main Physical Qualities. Power. Methods of Development and Control, Using Mobile Applications**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical importance of developing physical qualities in the system of preparation for professional activity, to form motivation and activate cognitive activity of students aimed at developing strength — the ability to overcome external resistance or resist it through muscular efforts, in order to increase the level of physical development and physical performance, strengthen the musculoskeletal system, increase overall functional fitness;

2. consolidate acquired knowledge on the methodology of drawing up an individual program using strength exercises aimed at the harmonious development of all muscle groups of the musculoskeletal system;

3. develop the skills and abilities of drawing up individual wellness programs, taking into account specific motor actions and conditions of their performance, types of strength abilities, as well as age, gender and individual characteristics of students.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

The student's independent work under the supervision of a teacher in a training session includes the preparation of a creative task in the form of a set of strength-oriented exercises: selection of 5-7 basic and auxiliary exercises, indicating the type of equipment (free weights, simulators, body weight); determination of training parameters (approaches, repetitions, intensity, rest time).

In the process of work, ongoing monitoring is carried out, physical fitness is assessed: strength endurance tests: maximum number of push-ups/pull-ups in 1 minute, plank. and the functional state of the body. The results are recorded in the «Self-monitoring log» with subsequent analysis to adjust the training process. Subjective comments on each workout (feeling of mental focus, coordination, fatigue), objective indicators: test results, changes in anthropometry (optional), identification of the relationship between the volume / intensity of training, recovery and growth of results. A critical assessment of the usefulness of each used application. Working with literature is considered as an important type of independent activity, contributing to the deepening of theoretical knowledge and the improvement of practical skills.

Methods of monitoring acquired knowledge and skills: checking the “Self-monitoring log” , Developing and implementing a personal strength cycle using digital technologies (for example, a 4-week program for developing one of the strength qualities (strength endurance, maximum strength, explosive strength).

Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).

2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва : Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>
3. Дальниченко Ю.В., Прудник А.А. Анатомия силовых упражнений Москва: изд-во АСТ, 2020. — 160 с. — (Большая энциклопедия фитнеса0/192311 (дата обращения: 29.07.2023)). — Режим доступа: для авториз. пользователей.
4. Дворкин, Л. С. Атлетическая гимнастика. Методика обучения: учебное пособие для вузов / Л. С. Дворкин. — Москва: Издательство Юрайт, 2023. — 148 с. — (Высшее образование). — ISBN 978-5-534-11034-0. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/516325> (дата обращения: 29.07.2023). а. — URL: <https://e.lanbook.com/book/331310> (дата обращения: 29.07.2023). — Режим доступа: для авториз. пользователей.

## Topic No.12 Old Russian Health-Improvement Systems

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. demonstrate the practical significance of «Russian Zdrava» wellness practices within professional training systems; to build motivation and stimulate student engagement in applying ancient Russian healing methods based on Aryan traditions, aligned with natural rhythms, cleansing and replenishment cycles, and the spiritual dimensions of health;
2. introduce students to the historical and cultural roots of «Russian Zdrava» as a traditional Russian folk method for health improvement and disease prevention;
3. consolidate knowledge of the key principles and practices of «Russian Zdrava» including the harmonization of physical, mental, and spiritual well-being;
4. develop skills in applying fundamental «Russian Zdrava» exercises and techniques—including the therapeutic use of water and cold exposure—for personal and professional health programs.

Integrate traditional practices into modern professional activities, taking into account natural cycles and spiritual aspects of health.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Supervised independent student work during the session includes developing a creative assignment in the form of a «Russian Zdrava» exercise complex. Ongoing assessment is conducted throughout the process as students master the basic «Zdrava» set: practicing a sequence of 3-4 canonical exercises under the instructor's guidance, focused on postural alignment, joint gymnastics, and self-massage (of the «Fatigue Begone» type).

Evaluation of functional and psychosomatic response: monitoring changes in muscle tone (sensations of core engagement and lightness), emotional state (feelings of calm and confidence), and quality of attention before and after the practices. Results are recorded in a «Self-monitoring log» with subsequent analysis to adjust the training process. Literature review is considered a vital form of independent activity, facilitating deeper theoretical knowledge and the refinement of practical skills, including the mastery of traditional «Russian Zdrava» wellness practices and identifying parallels between «Zdrava» exercises and elements of physical therapy, kinesitherapy, and breathing exercises.

Methods for assessing acquired knowledge and skills: a brief overview of the philosophical foundations of the «Russian Zdrava» system, review of the Self-control diary» demonstration of the exercise complex, and personal reflections on the applicability of «Zdrava» principles in modern life for stress prevention and maintaining holistic health.

Recommended reading:

1. Теоретические основы физической культуры: учебник для вузов / А. А. Горелов, О. Г. Румба, В. Л. Кондаков, Е. Н. Копейкина. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 194 с. — (Высшее образование). — ISBN 978-5-534-14341-6. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567748> (дата обращения: 29.05.2025).
2. Стриханов, М. Н. Physical education and sport в вузах: учебник / М. Н. Стриханов, В. И. Савинков. — 2-е изд. — Москва : Издательство Юрайт, 2025. — 160 с. — (Высшее образование). — ISBN 978-5-534-10524-7. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/564215>
3. Книга здоровья богатырей русских. Славянская система здоровья. Русская здрава, массаж, питание. Традиционная славянская методика оздоровления. <https://belibra.ru/Kniga-zdorovjija-bogatyrjeyi-russkikh-Slavyanskaya-sistyema-zdorovjija-Russkaya-zdrava-massazh-pitaniye.html>
4. Древнерусские системы оздоровления [https://studme.org/382694/meditsina/drevnerusskie\\_sistemy\\_ozdorovleniya](https://studme.org/382694/meditsina/drevnerusskie_sistemy_ozdorovleniya)

**Topic No.13 Control and Self-Control. Assessment of Functional Status. IT Aimed at Control and Self-Control of Physical Preparedness**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical significance of assessing the functional state of the body in the system of preparation for professional activity, to form motivation and activate the cognitive activity of students using a set of indicators reflecting the level of vital activity and the body's systemic response to physical exertion. Special attention is paid to the integration of digital technologies for monitoring and self-monitoring of physical fitness;
2. master the methods of determining the basic physiological parameters: heart rate (HR), respiratory rate (HR), blood pressure (BP) and vital lung capacity (VL) for individualizing the training process and evaluating the correctness of classes;
3. develop skills for assessing the functional state of the body based on the data obtained in order to control adaptation to physical exertion and increase the effectiveness of training;
4. introduce students to the use of digital technologies and devices for monitoring and self-monitoring of physical fitness.

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

The student's independent work under the supervision of a teacher in a training session includes the determination of heart rate (HR), respiratory rate (HR), measurement of blood pressure (BP) and vital lung capacity (VL). These indicators are used to individualize the training process, evaluate the correctness of classes and determine the functional state of the body. The results are recorded in the «Self-monitoring log» with subsequent analysis to adjust the training. Working with literature is considered as an important type of independent activity, contributing to the deepening of theoretical knowledge and the improvement of practical skills.

Methods of control of acquired knowledge and skills: checking the «Self-monitoring log» , assessment of the functional state

Recommended reading:

1. Рубанович, В. Б. Врачебно-педагогический контроль при занятиях физической культурой: учебник / В. Б. Рубанович. — 3-е изд., испр. и доп. — Москва : Издательство Юрайт, 2025. — 253 с. — (Высшее образование). — ISBN 978-5-534-07030-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. —

URL: <https://urait.ru/bcode/562228> (дата обращения: 29.05.2025).

2. Система контроля уровня физического развития и физической подготовленности для комплексной реабилитации и социальной интеграции лиц с отклонениями в состоянии здоровья: учебное пособие для вузов / Т. П. Бегидова [и др.]; под общей редакцией Т. П. Бегидовой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 87 с. — (Высшее образование). — ISBN 978-5-534-14809-1. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/520331>

**Topic No.14 Control and Self-Control. Optimal Movement Regimen and Rational Nutrition of People of Different Ages. IT Aimed at Control and Self-Control of Physical Preparedness**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical significance in the system of preparation for professional activity, to form a motive and, as a result, to activate the cognitive activity of students in order to observe an optimal motor regime and rational nutrition of people of different ages, the use of digital technologies for control and self-control;
2. familiarize students with the basics of optimal motor regime and rational nutrition for people of different age groups, taking into account the physiological characteristics and needs of the body;
3. consider the impact of a balanced diet and adequate physical activity on maintaining health and improving physical performance;
4. introduce modern digital technologies (fitness trackers, smart watches, mobile applications, smart scales and computer monitoring systems) for assessment, monitoring and self-monitoring of physical fitness;
5. develop skills in using digital devices and software to collect, analyze and interpret data on physical condition and physical activity;
6. develop the ability to develop individual programs of physical activity and rational nutrition based on the results of monitoring physical condition using digital technologies;
7. increase the motivation of students to regularly monitor and self-monitor their physical condition using modern digital tools to achieve optimal health and physical fitness

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Independent work of a student under the supervision of a teacher in a classroom involves the development of a digital memo (presentation) for their age group: motor mode: specific, measurable recommendations (for example, «10,000 steps per day», «strength exercises 3 times a week for 20 minutes»). Rational nutrition: principles of the plate, examples of healthy snacks, drinking regime. Digital Assistants: Top 3 recommended apps/gadgets with justification of choice. Work with literature and sources: collect and analyze official recommendations (WHO, national standards) on daily physical activity (moderate and high intensity), the need for strength and coordination exercises for their age group, study the principles of rational nutrition for a given age: key nutrients, metabolic features, water regime, prevention of typical deficiencies (for example, calcium, vitamin D). They conduct an analysis of the digital market.

Methods for assessing acquired knowledge and skills: demonstrating proficiency in digital technologies (apps, gadgets) for monitoring physical activity (steps, heart rate, calories) and dietary habits (caloric intake, macronutrients: proteins, fats, and carbohydrates). Developing an infographic project (fact sheet) featuring core physical activity and nutritional recommendations tailored to a selected age group.

Recommended reading:

1. Журин, А. В. Особенности и содержание здорового образа жизни студента: Учебное пособие для вузов / А. В. Журин. — Санкт-Петербург: Лань, 2022. — 52 с. — ISBN 978-5-8114-9293-0. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/221303> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
2. Васильева, И. В. Физиология питания: учебник и практикум для вузов / И. В. Васильева, Л. В. Беркетова. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 235 с. — (Высшее образование). — ISBN 978-5-534-16046-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/560772> (дата обращения: 29.05.2025). Таможникова, И. С.
3. Врачебный контроль в адаптивной физической культуре: учебно-методическое пособие / И. С. Таможникова. — Волгоград: ВГАФК, 2022 — Часть 1 — 2022. — 133 с. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/322967> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
4. Молочные продукты в рациональном питании: учебник для вузов / под редакцией Л. Н. Плохотнюка. — 2-е изд., перераб. и доп. — Москва : Издательство Юрайт, 2025. — 112 с. — (Высшее образование). — ISBN 978-5-534-18849-3. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/567993> (дата обращения: 29.05.2025).

**Topic No.15 Control and Self-Control. Determination of Physical Performance of Students During Exercise. IT Aimed at Control and Self-Control of Physical Preparedness**

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. demonstrate the practical significance of physical training as an essential component of professional activity and, on this basis, to foster a conscious motivation for regular exercise. To stimulate students' cognitive engagement by involving them in research and project-based work focused on selecting, justifying, and applying physical exercises that specifically develop the qualities necessary for success in their future professional careers;
2. analyze the job profile (professiogram) of their specialty and identify key professionally important qualities (PIQs) and adverse environmental factors in the workplace;
3. based on cognitive research, select and scientifically justify a complex of physical culture tools, sports, and wellness technologies to compensate for negative factors and develop the required professionally important qualities;
4. develop, personally test, and adjust a personal Professional and Applied Physical Training (PAPT) program for a short-term period (2–4 weeks);
5. master digital monitoring methods (fitness trackers, specialized apps) for an objective assessment of physical state dynamics and program effectiveness;
6. develop the ability to use physical culture and sports tools for active rest and recovery of working capacity during both working hours and leisure time

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Supervised independent student work during the session involves developing a complex of 8–12 exercises designed to develop key physical qualities essential for the profession. Ongoing assessment is conducted throughout the process, including an evaluation of physical fitness and the body's functional state. Results are recorded in a «Self-monitoring log» followed by an analysis to adjust the training process. Literature review is considered a vital form of independent activity, facilitating a deeper theoretical understanding of the physiological

mechanisms of exercise and refining practical skills in designing targeted APPT programs.

Methods for assessing acquired knowledge and skills: review of the «Self-monitoring log» and demonstration of skills in assessing physical working capacity using the Harvard Step Test.

Recommended reading:

1. Врачебный контроль в адаптивной физической культуре: учебно-методическое пособие / И. С. Таможникова. — Волгоград: ВГАФК, 2022 — Часть 1 — 2022. — 133 с. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/322967> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
2. Рубанович, В. Б. Врачебно-педагогический контроль при занятиях физической культурой: учебник / В. Б. Рубанович. — 3-е изд., испр. и доп. — Москва: Издательство Юрайт, 2025. — 253 с. — (Высшее образование). — ISBN 978-5-534-07030-9. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/562228> (дата обращения: 29.05.2025).
3. Система контроля уровня физического развития и физической подготовленности для комплексной реабилитации и социальной интеграции лиц с отклонениями в состоянии здоровья: учебное пособие для вузов / Т. П. Бегидова [и др.]; под общей редакцией Т. П. Бегидовой. — 2-е изд., перераб. и доп. — Москва: Издательство Юрайт, 2023. — 87 с. — (Высшее образование). — ISBN 978-5-534-14809-1. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/520331>
4. Капилевич, Л. В. Физиология человека. Спорт: учебник для вузов / Л. В. Капилевич. — Москва: Издательство Юрайт, 2025. — 159 с. — (Высшее образование). — ISBN 978-5-534-17065-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/561304> (дата обращения: 29.05.2025).
5. Шумская, О. О. Научные основы общей физической подготовки: учебное пособие / О. О. Шумская, Е. П. Шарина. — Владивосток: МГУ им. адм. Г.И. Невельского, 2023. — 83 с. — ISBN 978-5-8343-1228-4. — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/371804> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
6. Солодков А.С., Сологуб Е.Б. Физиология человека. Общая. Спортивная. Возрастная: учебник. - 9 изд. М.: Спорт, 2020 – 620с.

### Topic No.16 Professional and Applied Physical Training (PAPT)

Duration of the practical class (in academic hours):

4

Purpose of the practical class:

1. reveal the practical importance of physical training as an integral element of the professional activity system and, on this basis, to form a conscious motivation for regular classes. To enhance the cognitive activity of students by involving them in research and project work on the selection, justification and application of physical exercises that purposefully develop the qualities necessary for successful implementation in the future profession;
2. analyze the occupational profile of your specialty and identify key professionally important qualities and unfavorable factors of the working environment;
3. on the basis of cognitive search, select and scientifically substantiate a set of means of physical culture, sports and wellness technologies to compensate for negative factors and develop the required professionally important qualities;
4. develop, personally test, and adjust a personal Professional and Applied Physical Training (PAPT) program for a short-term period (2–4 weeks).

Practical classes requirements: equipped with sports equipment, subject guides for the discipline.

Supervised independent student work during the session includes developing a set of 8–12 exercises designed to enhance key physical qualities essential for the medical profession. Ongoing assessment is conducted throughout the process, including an evaluation of physical fitness and the body's functional state. Results are recorded in a «Self-monitoring log» with subsequent analysis to adjust the training process. Literature review is considered a vital form of independent activity, facilitating deeper theoretical knowledge of the physiological mechanisms of exercise and refining practical skills in designing targeted APPT programs.

Methods for assessing acquired knowledge and skills: review of the «Self-monitoring log» and a personalized physical self-education program for Applied Professional Physical Training (APPT) tailored for a General Practitioner (Primary Care Physician), developed using the Fitbit Coach app.

Recommended reading:

1. Профессионально-прикладная физическая подготовка: учебник для вузов / под редакцией Н. А. Воронова. — 2-е изд., испр. и доп. — Москва : Издательство Юрайт, 2025. — 140 с. — (Высшее образование). — ISBN 978-5-534-12268-8. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/566666> (дата обращения: 29.05.2025)
2. Мандриков, В. Б. Учебная дисциплина «Физическая подготовка (элективные модули)» в учебном процессе медицинского вуза: учебное пособие / В. Б. Мандриков, Н. В. Замятина, И. А. Ушакова. — Волгоград: ВолгГМУ, 2023. — 108 с. — ISBN 978-5-9652-0876-0 УДК 796:378.661(075). — Текст: электронный // Лань: электронно-библиотечная система. — URL: <https://e.lanbook.com/book/379211> (дата обращения: 29.05.2025). — Режим доступа: для авториз. пользователей.
3. Полиевский, С. А. Профессиональная и военно-прикладная физическая подготовка на основе экстремальных видов спорта: учебник для вузов / С. А. Полиевский, Р. Т. Раевский, Г. А. Ямалетдинова; под научной редакцией С. А. Полиевского, Г. А. Ямалетдиновой. — 2-е изд., испр. и доп. — Москва : Издательство Юрайт, 2025. — 378 с. — (Высшее образование). — ISBN 978-5-534-12699-0. — Текст: электронный // Образовательная платформа Юрайт [сайт]. — URL: <https://urait.ru/bcode/566640> (дата обращения: 29.05.2025).

#### 4. GUIDELINES FOR CONTINUOUS AND INTERIM ASSESSMENT

Table 3. Guidelines for Conducting Continuous and Interim Assessment during the **Б1.В.06 Foreign language** Course

Type of assessment	Assessment format
Continuous assessment	<ul style="list-style-type: none"><li>- assessment and evaluation of results of assignments given during practical classes;</li><li>- assessment and evaluation of results of independent work and control given during practical classes;</li><li>- assessment and evaluation of results of practice problems given during practical classes.</li></ul>
Interim certification	is conducted in the oral pass/fail test format; it allows to assess the development of students' competencies correlating with types of professional activity..

## **5 ASPECTS OF THE IMPLEMENTATION OF THE COURSE FOR STUDENTS WITH DISABILITIES AND SPECIAL NEEDS**

### **5.1. Availability of accessible environment**

For students with disabilities and special needs, if a written application is submitted, lectures and practical classes are carried out taking into account health limitations, individual capabilities and medical status (hereinafter referred to as individual characteristics) of the student. Compliance with the following general requirements is ensured: teaching aids for collective and individual use are provided, required technical assistance is provided by an assistant, buildings and premises where lectures and practical classes are taking place meet accessibility requirements, other arrangements lack of which makes it impossible or difficult to master the discipline are made.

### **5.2. Compliance with general requirements**

When lectures and practical classes are carried out at the written application of the student, the following general requirements are met: lectures and practical classes for students with disabilities and special needs take place at the same location as for students who do not have disabilities, if this does not cause difficulties for students; an assistant (assistants), who provide(s) students with the necessary technical assistance taking into account individual characteristics of the student, is (are) provided; necessary teaching aids are provided, taking into account individual characteristics of the student.

5.3. Availability of the internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia to students with disabilities in a form accessible to them.

All internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia concerning the discipline are made available to students with disabilities in a form accessible to them.

5.4. Increase in the duration of interim assessment of students with disabilities and special needs in relation to the established duration

Format of the interim assessment of academic performance within the scope of the discipline for students with disabilities and special needs is selected taking into account individual characteristics (orally, by writing on paper, by typing on a computer, as a test, etc.). The duration of the interim assessment in relation to the established duration is increased at the written application of the student with disabilities. Time limit for the student's preparation for the test is increased by at least 0.5 hours

## **6. STAFFING REQUIREMENTS OF THE DISCIPLINE**

Academic teaching personnel that ensure the implementation of the discipline education process meet the requirements of the Federal State Educational Standard of Higher Education for the 31.05.01 General Medicine specialty; list of the aforementioned personnel is available on the website of the educational organization.

