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**MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN
FEDERATION**

Federal State Autonomous Educational Institution of Higher Education

"Moscow Polytechnic University"


APPROVE
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" 15 " *февраль* 2024

Dean of the Faculty
of Economics and Management
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" 15 " *февраль* 2024

WORKING PROGRAM OF THE DISCIPLINE

"Physical Education and Sports"

Field of study
38.03.02 Management

Educational program (profile)
"Business Process Management"

Qualification (degree)
Bachelor

Form of study
Part-time

Moscow 2024

Developer(s):

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associate professor



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1. Goals, objectives and planned learning outcomes in the discipline

Purpose mastering the discipline “Physical Culture and Sports” is the formation of the individual’s physical culture and the ability to purposefully use a variety of means of physical culture, sports and tourism to preserve and strengthen health, psychophysical preparation and self-preparation for future life and professional activities.

Achieving this goal involves solving the following educational, educational, developmental and health-improving tasks:

- understanding the social significance of physical culture and its role in personal development and preparation for professional activity;
- knowledge of the biological, psychological, pedagogical and practical foundations of physical culture and a healthy lifestyle;
- formation of a motivational and value-based attitude towards physical culture, an attitude towards a healthy lifestyle, physical improvement and self-education of the habit of regular exercise and sports;
- mastering a system of practical skills that ensure the preservation and strengthening of health, mental well-being, development and improvement of psychophysical abilities, qualities and personality traits, self-determination in physical culture and sports;
- acquiring personal experience in improving motor and functional capabilities, ensuring general and professionally applied physical preparedness for a future profession and everyday life;
- creating a basis for the creative and methodologically sound use of physical culture and sports activities for the purpose of subsequent life and professional achievements.

Planned learning outcomes in the discipline.

The graduate must:

know:

- scientific and practical foundations of physical culture and a healthy lifestyle.

be able to:

- use means and methods of physical education for professional and personal development, physical self-improvement, formation of a healthy image and lifestyle.

own:

- means and methods of strengthening individual health, physical self-improvement, values of physical culture of the individual for successful socio-cultural and professional activities.

Training in the discipline “Physical Culture and Sports” is aimed at developing the following competencies in students:

Code and name of competencies	Indicators of Competency Achievement
UK-7 Able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities	IUC-7.1. Competently chooses health-preserving methods to maintain a healthy lifestyle, taking into account the physiological characteristics of the body and the conditions for the implementation of professional activities IUC-7.2. Maintains an optimal level of physical activity to ensure full social and professional functioning IUC-7.3. Complies with healthy lifestyle standards in various life situations and in professional activities

2. Place of discipline in the structure of the educational program

The discipline “Physical Culture and Sports” is one of the academic disciplines of the compulsory part of the basic cycle (B1) of the main educational program of a bachelor’s/specialist’s degree.

“Physical Culture and Sports” is logically, substantively and methodologically interconnected with the following disciplines of the educational program:

- Story;
- Philosophy;
- Life safety.

3. Structure and content of the discipline

The total labor intensity of the discipline is 2 credit units (72 hours).

3.1 Types of educational work and labor intensity

(according to forms of study)

3.1.2. Part-time education

No.	Type of educational work	Number of hours	Semester
			1
	Auditory lessons	10	10
	Including:		
1	Lectures	-	-
2	Seminars/practical sessions	10	10
3	Laboratory exercises	-	-
	Independent work	62	62
	Including:		
1	Using distance learning technologies	62	62
	Interim certification		
	Test		X
	Total	72	72

3.2 Thematic plan for studying the discipline (according to forms of study)

3.2.2. Part-time education

No.	Sections/topics disciplines	Labor intensity, hour					
		Total	Classroom work				Independent work
			Lectures	Seminars/practical sessions	Laboratory exercises	Practical training	
1.	Physical culture and sports in general cultural and professional training of students	6		2			4
1.1	Physical culture and sports in the system of vocational education	2					2
1.2	Basic scientific concepts and structure of physical culture	2					2
1.3	Physical culture of the individual and methods of self-assessment of its formation	2		2			
2.	Healthy lifestyle and lifestyle of students	4					4
2.1	Health structure and criteria for managing human health	1					1
2.2	The concepts of healthy lifestyle and healthy lifestyle of students and its components	1					1
2.3	Assessment of work and rest schedule	1					1
2.4	Assessment of human motor activity	1					1
3.	Socio-biological foundations of physical culture	10		2			8
3.1	Physical culture in the socio-biological development of man.	1					1
3.2	Anatomical systems of the body and the influence of physical education and sports on them.	1					1
3.3	Psychophysiological characteristics of students' work	1					1
3.4	Physiological indicators of fitness	1					1
3.5	Methods for assessing physical development and correcting posture and physique	2					2
3.6	Methods of self-monitoring of the functional state of the body	2		2			
3.7	Methods for assessing somatic health. Express assessment according to G.L. Apanasenko	2					2

4.	General physical training in the physical education system	35		2			33
4.1	General issues of purposeful pedagogical process of physical education	1					1
4.2	Development of physical and formation of mental qualities in process of physical education	1					1
4.3	Development of general endurance	6					6
4.4	Development of speed and speed abilities	6					6
4.5	Development of strength and speed-strength abilities	6					6
4.6	Development of flexibility	6					6
4.7	Development of dexterity and coordination abilities	6					6
4.8	Methodology for self-assessment of the level and dynamics of general physical fitness	2		2			
4.9	Comprehensive assessment of students' physical fitness	1					1
5.	Fundamentals of methods of independent exercise	6		2			4
5.1	Organization of independent physical exercises	2					2
5.2	Methodology for compiling a complex of morning hygienic gymnastics	2					2
5.3	Methodology for creating a program of independent training sessions	2		2			
6.	Sports training in the physical education system	6					6
6.1	Sports: mass, elite, Olympic, student. Main groups of sports.	1					1
6.2	Studying the needs and attitudes towards physical education and sports activities.	1					1
6.3	Individual choice of sports or physical activity	1					1
6.4	Assessment of special physical fitness in your chosen sport.	2					2
6.5	Means and methods of muscle relaxation in sports	1					1
7.	Professional applied physical training of students	5		2			3
7.1	Fundamentals of professional applied physical training	1					1
7.2	Methods for studying the elements of the structure of psychophysical readiness for a future profession	2		2			

7.3	Methodology for conducting industrial gymnastics, taking into account the given conditions and nature of work	1					1
7.4	Methods for regulating psycho-emotional state	1					1
Total		72		10			62

3.3 Contents of the discipline

Section 1. Physical culture and sports in general cultural and professional training of students

Topic 1. Physical culture and sports in the system of vocational education

Regulatory and legal foundations of the discipline “Physical Culture and Sports” in educational institutions of the Russian Federation. Physical culture and sports in the system of vocational education. Application of scientific knowledge of the theory of physical culture. Organization of physical education at the university.

Topic 2. Basic scientific concepts and structure of physical culture

Basic scientific concepts of physical culture in connection with historical development. Physical culture as part of universal human culture. Structure of physical culture. Non-special physical education. Sport. Physical recreation. Motor rehabilitation.

Topic 3. Physical culture of the individual and methods of self-assessment of its formation

Studying the structural elements and levels of formation of a person’s physical culture. Mastering the methodology for self-assessment of the level of development of a person’s physical culture.

Section 2. Healthy lifestyle and lifestyle of students

Topic 1. Health structure and criteria for managing human health

Modern ideas about human health in various sciences. The structure of health and criteria for managing human health. Physical health. Mental health. Social health. Professional health. Factors ensuring the health of modern man: heredity, ecology, medicine, lifestyle.

Topic 2. Concepts of healthy lifestyle and healthy lifestyle of students and its components.

The concept of a healthy lifestyle and healthy lifestyle of students and its components. Work and rest schedule. Rational nutrition Personal hygiene. Hardening. Optimal physical activity. Rejection of bad habits. Culture of interpersonal relations.

Topic 3. Assessment of work and rest regime

Studying the basics of organizing a rational daily routine for students. Mastering the methodology for assessing your work and rest regime.

Topic 4. Assessment of human motor activity

Study of physical activity as a fundamental factor in preventing the occurrence of non-communicable diseases. Familiarization with the reasons for the lack of movement in the modern world. Mastering the methodology for assessing motor activity.

Section 3. Socio-biological foundations of physical culture

Topic 1. Physical culture in the socio-biological development of man.

Physical culture and sport as social phenomena of society. The importance of physical education and sports in the socialization of the individual. Biological component of physical culture. Biological patterns of the positive effect of physical exercise on the human body, physiological and biochemical laws of this phenomenon. An organism is a complex biological system, with no less complex evolutionarily formed regulatory mechanisms. Examples of self-regulation at different levels of organization of living matter. Comparison of nervous and humoral regulatory mechanisms in the body.

Topic 2. Anatomical systems of the body and the influence of physical education and sports on them.

The positive effect of physical exercise on the following body systems: skeletal (human skeleton), muscular, blood system, cardiovascular, respiratory, digestive, excretory, nervous, endocrine, analyzer system. Environmental factors affecting living organisms. Substances necessary for its life, as well as irritants (useful and harmful) that disrupt the constancy of the internal environment.

Topic 3. Psychophysiological characteristics of students' work

Mastering your future profession. Educational, cognitive and work activities of students. Physical and mental work. Contents of physiological processes of performance, fatigue, tiredness, overwork, recovery. Hypokinesia and physical inactivity. Biological rhythms.

Topic 4. Physiological indicators of fitness

Energy processes in muscles and health training. Characteristics of the body's energy systems in highly qualified athletes. Power and capacity of the energy system. Basic rules of health training. Physiological indicators of fitness in a state of relative rest, when performing a standard load, at maximum load. Economization of functions. Response to standard (testing) loads. Fitness indicators when performing maximum load.

Topic 5. Methods for assessing physical development and correcting posture and physique

The importance of physical development at different stages of human ontogenesis. Basic methods for determining and assessing physical development. Somatoscopy. Body type. The influence of physical education and sports on somatoscopy indicators. Measuring anthropometric indicators. Description of the main anthropometric indicators. Calculation of anthropometric indices.

Topic 6. Methods of self-monitoring of the functional state of the body

Self-monitoring of the functional state of the cardiovascular system. Heart rate as an important indicator of self-control. Blood pressure as one of the indicators of the functional state of the cardiovascular system. Test procedure with standard load. Respiration rate as an important indicator of self-control. Vital capacity of the lungs as one of the indicators of the functional state of the respiratory system. Other indicators of the functional state of the respiratory system. Methodology for conducting functional tests.

Topic 7. Methods for assessing physical health. Express assessment according to G.L. Apanasenko

Possibility of quantitative assessment of human health. Methods for quantitative assessment of somatic health. Advantages of assessing the level of somatic health according to G.L. Apanasenko. Methodology for express assessment of the level of somatic health according to G.L. Apanasenko. Formation programs of health-improving activities in accordance with the level of somatic health.

Section 4. General physical training in the physical education system

Topic 1. General issues of purposeful pedagogical process of physical education

Methodological principles of physical education. The concept of physical education methods and their structural basis. Fundamentals of movement training. Motor abilities and skills as a subject of study in physical education. Means of physical education.

Topic 2. Development of physical and formation of mental qualities in process of physical education

Physical abilities and physical qualities. Education of physical qualities. Formation of mental qualities and personality traits in the process of physical education. General physical training (GPP). Goals and objectives of general physical training.

Topic 3. Development of general endurance

General characteristics of endurance as a physical quality. General and special endurance. Physiological basis of general endurance. Types of special endurance. Means and methods of training endurance. Methods for measuring endurance.

Topic 4. Development of speed and speed abilities

General characteristics of speed as a physical quality. Elementary and complex forms of manifestation of speed abilities. Types of motor reaction. Types of complex motor reactions. Means and methods of training speed. Age-related characteristics of training speed. Criteria and methods for assessing speed and speed abilities.

Topic 5. Development of strength and speed-strength abilities

General characteristics of strength as a physical quality. Types of strength and strength abilities. Means and methods of developing strength. Methods for measuring force. Methodological features of the use of some strength exercises.

Topic 6. Development of flexibility

General characteristics of flexibility as a physical quality. Forms of manifestation of flexibility. Types of flexibility. Means and methods of developing flexibility. Methods for measuring flexibility.

Topic 7. Development of dexterity and coordination abilities

General characteristics of agility as a physical quality. Agility structure. Types and degrees of development of dexterity. Characteristics of coordination abilities. Means and methods of training dexterity. Methods for measuring agility and coordination abilities.

Topic 8.Methodology for self-assessment of the level and dynamics of general physical fitness

Structure of physical fitness. Physical readiness index. Methodology for monitoring the level of development of physical qualities and related abilities. Self-assessment of the level and dynamics of general physical fitness to assess the effectiveness of the training process.

Topic 9. Comprehensive assessment of students' physical fitness

Comprehensive assessment of physical fitness in international practice. VFSK GTO. Methodology for a comprehensive assessment of students' physical fitness. Assessment of the level of physical fitness.

Section 5. Fundamentals of the methodology for independent physical exercises

Topic 1. Organization of independent physical exercises

Formation of motives for independent physical exercises. Planning independent studies. Forms and organization of independent studies. Methodology of independent training sessions. Hygiene of self-study. Self-monitoring of the effectiveness of independent studies. Prevention of injuries during independent physical exercises.

Topic 2.Methodology for compiling a complex of morning hygienic gymnastics

Selection and direction of exercises. Sequence of exercises in a complex. Description of exercises. Gymnastics terminology. Exercise intensity and dosage.

Topic 3.Methodology for creating a program of independent training sessions

Basics of planning training sessions. The purpose (direction) of the program of independent training sessions. Selection of physical education means for implementing a program of independent training sessions. Rules for health training. Independent planning and implementation educational and training sessions.

Section 6. Sports training in the physical education system

Topic 1. Sports: mass, elite, Olympic, student. Main groups of sports.

Sports training. The purpose of sports training. Structure of an athlete's preparedness. Characteristics of technical, physical, tactical and mental training. Features of elite sports and mass sports. Sports classification, its structure. College sports. Organizational forms of mass sports work. System of student sports competitions. Public student sports organizations. International sports movement. Olympic Games and Universiade.

Topic 2. Study of needs and attitudes towards physical education and sports activities

Value and need-activity approach in the theory of culture. Needs for physical education. Study methodology students' attitudes towards physical education and sports.

Topic 3.Individual choice of sports or physical activity

Justification for individual choice of sports (or systems of physical exercises) for students. Brief psychophysiological characteristics of the main groups of sports and physical exercise systems.

Topic 4. Assessment of special physical fitness in your chosen sport.

Special physical training (SPP). Goals and objectives of the SPP. Classification of physical exercises. Assessment of types of preparedness, functional state, technique of performing physical exercises in the chosen sport.

Topic 5. Means and methods of muscle relaxation in sports

Active and passive means of relaxation in sports. Types of stretching and their characteristics. Recommended exercises for stretching muscles. Basics of self-massage techniques. Myofascial release (MFR).

Section 7. Professional applied physical training of students

Topic 1. Fundamentals of professional applied physical training

Definition of professional applied physical training and its goals. List of tasks. Applied knowledge, abilities, skills, psychophysical and special qualities. Selection of means of professional applied physical training, taking into account the characteristics of the educational process. Prevention of occupational diseases and injuries through physical culture and sports.

Topic 2. Methods for studying the elements of the structure of psychophysical readiness for a future profession

The structure of psychophysical readiness for a future profession. Initial idea of the profession. Study of professional inclinations. Description of the profession using the classification according to Klimov E.A. Study of the type of nervous system. Study of special professional abilities.

Topic 3. Methodology for conducting industrial gymnastics, taking into account the given conditions and nature of work

Optimal work organization. Industrial physical culture. Forms of industrial gymnastics: introductory gymnastics, physical education break, physical education minute. Rules for selecting exercises for industrial gymnastics complexes.

Topic 4. Methods for regulating psycho-emotional state

Studying the possibility of regulating the psycho-emotional state in the process of educational and work activities. Mastering the technique of regulating the psycho-emotional state using relaxation techniques.

3.4 Topics of seminars/practical classes

3.4.1. Seminars/practical sessions

Practical material consists of two sections:

1. methodological – ensuring mastery of methods and methods of physical culture and sports activities to achieve educational, professional and life goals of the individual;
2. educational and training – aimed at the development of functional and motor abilities, the formation of the necessary qualities and personality traits, the

acquisition of personal experience, providing the opportunity for independent, purposeful and creative use of the means of physical culture and sports.

Test assignments and exercises contribute to personal and objective accounting of students' activities and determination of the knowledge they receive in the discipline "Physical Culture and Sports".

Students who have passed a medical examination and determined their health group (basic, preparatory, special "A" or "B") are allowed to participate in practical classes.

Classes are held in the main and special educational departments.

Students assigned to the main or preparatory medical groups are enrolled in the main educational department. The number of study groups is no more than 20 people.

Educational and training sessions in the main department are based on the use of various means of physical education, sports and professionally applied physical training.

The means of the practical section necessarily include certain types of athletics, sports games, and professional-applied physical training exercises. The practical section can use physical exercises from various sports and health-improving systems of physical exercise.

In the main department, classes are conducted with a focus on improving general physical fitness using the means of one or more sports, determined by the capabilities of the sports base where the classes are held.

Students classified for health reasons in the special medical group "A" or "B" are enrolled in the special educational department. The number of study groups is no more than 12 people.

Practical educational material (including test requirements and standards) for educational groups of a special department is developed taking into account medical indications and contraindications for each student.

The educational process in a special department is aimed at strengthening health, hardening the body and increasing the level of physical performance of students, as well as eliminating functional deviations and deficiencies in physical development. A special place is given to the formation of knowledge and skills of self-control, self-massage, skills of independent use of physical exercises in organizing a motor regimen, taking into account the state of health and disease.

The content and specific means of each practical lesson are determined by the teacher. The teacher is solely responsible for ensuring that the exercises used and their dosages are appropriate to the capabilities of each individual student.

For medical reasons, a student can be transferred to a special department at any time.

Students, temporarily exempted from performing physical exercises as part of practical classes in physical culture and sports for a period of more than one month for medical reasons, carry out the discipline program in the distance learning system.

4. Educational, methodological and information support

4.1 Regulatory documents and GOSTs

1. Russian Federation. Constitution (1993). Constitution of the Russian Federation:

adopted by popular vote on December 12, 1993. Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. – URL:

http://www.consultant.ru/document/cons_doc_LAW_28399/.

2. Russian Federation. Laws. On physical culture and sports in the Russian Federation: Federal Law of December 4, 2007 N 329-FZ. – Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. –

URL: http://www.consultant.ru/document/cons_doc_LAW_73038/.

3. Russian Federation. Laws. On the basics of protecting the health of citizens in the Russian Federation: Federal Law of November 21, 2011 N 323-FZ. – Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. –

URL: http://www.consultant.ru/document/cons_doc_LAW_121895/.

4. Russian Federation. Laws. On education in the Russian Federation: Federal Law of December 29, 2012 N 273-FZ. – Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. – URL:

http://www.consultant.ru/document/cons_doc_LAW_140174/.

5. Russian Federation. Resolutions. On approval of the Regulations on the All-Russian Physical Culture and Sports Complex “Ready for Labor and Defense” (GTO): Decree of the Government of the Russian Federation of June 11, 2014 N 540. Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. – URL: http://www.consultant.ru/document/cons_doc_LAW_164253/

6. Russian Federation. Orders. “On approval of state requirements of the All-Russian physical culture and sports complex “Ready for Labor and Defense” (GTO)”: Order of the Ministry of Sports of the Russian Federation dated February 22, 2023 N 117. – Text: electronic // Non-commercial Internet versions of the ConsultantPlus system. –

URL: https://www.consultant.ru/document/cons_doc_LAW_443204/

4.2 Main literature

1. Pleshakov, A.A. Physical culture and physical education of students in higher education: textbook / A. A. Pleshakov, M. A. Semenov. - M.: Moscow Polytechnic, 2020. - 76 p. –

<https://online.mospolytech.ru/mod/data/view.php?d=127&rid=4450>

2. Physical education of students of a special medical group: educational and methodological manual / M.A. Semyonova, E.E. Shcherbakova, M.V. Zheleznyakova. – Moscow: Moscow Polytechnic, 2021.

<https://online.mospolytech.ru/mod/data/view.php?d=127&rid=4521>

3. Physical culture: textbook / M. Ya. Vilensky, V. Yu. Volkov, L. M. Volkova [and others]. – 3rd edition. – Moscow: Limited Liability Company “Publishing House “KnoRus”, 2020. – 424 p.
4. Gilev, G. A. Physical education of students: Textbook / G. A. Gilev, A. M. Katkova; Moscow Pedagogical State University. – Moscow: Moscow Pedagogical State University, 2018. – 336 p.
[p.https://elibrary.ru/item.asp?id=37101024](https://elibrary.ru/item.asp?id=37101024)

4.3 Additional literature

1. Manzheley, I. V. Physical culture: a competency-based approach: textbook / I. V. Manzheley, E. A. Simonova. - Moscow ; Berlin: Direct-Media, 2015. – 185 p. : ill. – Access mode: by subscription. – URL:<https://biblioclub.ru/index.php?page=book&id=364912>
2. Pismensky, I. A. Physical culture: a textbook for universities / I. A. Pismensky, Yu. N. Allyanov. - Moscow: Yurayt Publishing House, 2022. - 450 p. - (Higher education). — ISBN 978-5-534-14056-9. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/489224>
3. Student's independent work in physical education: textbook for universities / V. L. Kondakov [etc.]; edited by V. L. Kondakov. — 2nd ed., rev. and additional - Moscow: Yurayt Publishing House, 2022. - 149 p. - (Higher education). — ISBN 978-5-534-12652-5. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/495966>
4. Stebletsov, E. A. Hygiene of physical culture and sports: a textbook for universities / E. A. Stebletsov, A. I. Grigoriev, O. A. Grigoriev; edited by E. A. Stebletsov. - Moscow: Yurayt Publishing House, 2022. - 308 p. - (Higher education). — ISBN 978-5-534-14311-9. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/496688>
5. Theoretical foundations of physical culture: textbook for universities / A. A. Gorelov, O. G. Rumba, V. L. Kondakov, E. N. Kopeikina. — 2nd ed., revised. and additional - Moscow: Yurayt Publishing House, 2022. - 194 p. - (Higher education). — ISBN 978-5-534-14341-6. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/496822>
6. Usakov, V. I. Student about health and physical education: textbook / V. I. Usakov. - Moscow ; Berlin: Direct-Media, 2016. – 105 p. : ill., table. – Access mode: by subscription. – URL:<https://biblioclub.ru/index.php?page=book&id=441285>
7. Physical culture: textbook for universities / E. V. Koneeva [etc.]; edited by E. V. Koneeva. — 2nd ed., revised. and additional - Moscow: Yurayt Publishing House, 2022. - 599 p. - (Higher education). — ISBN 978-5-534-12033-2. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/494126>
8. Physical culture and sports at university: textbook: [16+] / A. V. Zavyalov, M. N. Abramenko, I. V. Shcherbakov, I. G. Evseeva. - Moscow ; Berlin: Direct-Media,

2020. – 106 p. : ill. – Access mode: by subscription. – URL:<https://biblioclub.ru/index.php?page=book&id=572425>
9. Physical culture and physical training: textbook / V. Ya. Kikot, I. S. Barchukov, Yu. N. Nazarov [etc.]; edited by V. Ya. Kikot. – 2nd ed., revised. and additional – Moscow: Unity-Dana, 2020. – 456 p. : ill. – Access mode: by subscription. – URL:<https://biblioclub.ru/index.php?page=book&id=692047>
10. Physical self-improvement: textbook for universities / A. A. Zaitsev [et al.]; edited by A. A. Zaitsev. — 2nd ed., revised. and additional - Moscow: Yurayt Publishing House, 2022. - 108 p. - (Higher education). — ISBN 978-5-534-12579-5. — Text: electronic // Educational platform Urayt [website]. — URL:<https://urait.ru/bcode/496319>

4.4 Electronic educational resources

1. An electronic educational resource on the discipline is under development.

4.5 Licensed and freely distributed software

- Microsoft Windows;
- Microsoft Office software;
- Comprehensive Anti-Virus Protection System Kaspersky
- Dr.Web anti-virus program;
- 7-ZIP – archiver<https://7-zip.org.ua/ru/>

4.6 Modern professional databases and information reference systems

1. <http://www.fismag.ru/> Website of the magazine Physical Culture and Sports
2. <http://kzg.narod.ru/> Website of the magazine Culture of Healthy Life
3. <http://teoriya.ru/ru/taxonomy/term/2> Website of the magazine “Physical culture: upbringing, education, training”
4. <http://teoriya.ru/ru/taxonomy/term/3> Website of the journal “Theory and Practice of Physical Culture”
5. <http://www.afkonline.ru/biblio.html> Website of the magazine “Adaptive Physical Culture (APK).
6. <https://elibrary.ru/> - Scientific electronic library
7. Official Internet portal of the legal information database <http://pravo.gov.ru>.
8. Portal Single window of access to educational resources <http://window.edu.ru/>
9. Educational platform "Urayt". For universities and colleges. Electronic Library System (ELS) <https://urait.ru/>
10. Electronic library system (ELS) “University library ONLINE” <http://biblioclub.ru/>

5. Logistics support

To fulfill the objectives of the discipline “Physical Culture and Sports” the university uses the following sports facilities:

Gym No. 1 (B. Semenovskaya St., 38, A-112a), playroom, area 620 sq.m. equipped with a teaching room, two locker rooms with showers, and a laboratory room.

Gym No. 2 (B. Semenovskaya St., 40A), training and gymnastics, with an area of 198 sq.m., equipped with gymnastic equipment (crossbar, parallel bars, rings, pommel horse, tumbling track), a set of exercise equipment for various muscle groups, and barbells. The gym has three locker rooms, two showers, and a teachers' room.

Gym No. 3 (M. Semenovskaya St., 12), area 280 sq.m., equipped with two wrestling mats and a set of exercise equipment. The gym has three locker rooms with showers, a teaching room and a laboratory room.

Gym No. 4 (Pavel Korchagin St., 22, PK-103, 103a)

1) strength all-around hall with an area of 114 sq.m., equipped with a set of exercise machines, barbells, weights, dumbbells;

2) a gym with an area of 50 sq.m., equipped with punching bags, barbells, and weights. The hall has two locker rooms, a shower, and a teaching room.

Gym No. 5 (Pavel Korchagin St., 22, PK-102)

area 144 sq.m., equipped with a set of exercise machines, barbells, weights, dumbbells.

Gym No. 7 (Pavel Korchagina St., 22, room 519a), area 234 sq.m., equipped with two changing rooms with showers, soft flooring.

Gym No. 9 (Avtozavodskaya str., 16, building 4, room.3501), area 30 sq.m. The health-improving physical education hall is equipped with two locker rooms, pressure measuring devices, gymnastic mats, mats, hoops, dumbbells, and gymnastic sticks.

Sports complex on Avtozavodskaya (Avtozavodskaya str., 16, room.2802)

Equipped with two locker rooms with showers, three teaching rooms, computer and office equipment, teaching rooms, and an equipment storage room

1) **Game room**, area 450 sq.m. Balls available for playing volleyball, basketball, tennis, badminton.

2) **Gym**, with an area of 20 sq.m., equipped with a set of exercise machines for various muscle groups and barbells.

Sports complex on Mikhalkovskaya (Mikhalkovskaya str. 7, building 2)

1) **Athletic gymnastics hall**, equipped with equipment and supplies for athletic gymnastics and strength sports (complex training devices, dumbbells, barbells, plates, weights);

2) **Weightlifting hall**, equipped with equipment and supplies for weightlifting, powerlifting and kettlebell lifting (platform, racks, barbells, plates, weights);

3) **Physical rehabilitation hall**, is equipped with equipment and supplies for classes with students with disabilities (expanders, gymnastic sticks, dumbbells, gymnastic mats, jump ropes).

- 4) **Ski base.** Equipment and supplies for athletics and ski training (skis with boots, ski poles, Nordic walking poles)
- 5) **Sports games hall,** equipped with equipment and supplies for playing sports (volleyball stands, basketball backboards, basketballs and volleyballs);
- 6) **Table tennis hall,** equipped with equipment and supplies for table tennis (table tennis tables, nets, protective edges, rackets and table tennis balls).
- 7) **Martial arts hall,** equipped with equipment and supplies for practicing martial arts (wrestling mat, covering mats, rubber expanders, boxing pads);
- 8) **Aerobics room,** equipped with equipment and supplies for aerobics (step platforms, dumbbells, gymnastic mats, jump ropes).

6. Guidelines

6.1 Methodological recommendations for teachers on organizing training

The main requirement for teaching the discipline is a creative, problem-based interactive approach, which makes it possible to increase students' interest in the content of the educational material.

The main form of obtaining and consolidating knowledge in the discipline is theoretical and practical materials.

The basis of the educational process in the discipline is educational and training sessions. In the learning process, various types of training sessions are used, both classroom and extracurricular. At the first lesson in the discipline, it is necessary to familiarize students with the procedure for studying it, reveal the place and role of the discipline in the system of sciences, its practical significance, inform students of the requirements for successfully passing the intermediate certification, and answer questions that arise.

The purpose of practical classes is to ensure control of students' assimilation of educational material, expansion and deepening of the knowledge they acquired while studying theoretical material and during independent work. Increasing the effectiveness of practical classes is achieved, among other things, by creating a creative environment.

The teacher must regularly keep a log of students' academic work and attendance, and find out the reasons for students' absence from classes.

6.2 Guidelines for students on mastering the discipline

Independent work is one of the types of knowledge acquisition by students and is aimed at:

- studying theoretical material, preparing for training sessions,
- mastery of a system of practical skills that ensure the preservation and strengthening of health.

Independent work of students is the most important link in the educational process, without the proper organization of which a student cannot become a highly qualified bachelor/specialist.

The student must remember that independent studies should be conducted regularly. It is important to put in maximum effort, willpower and work hard from day one.

Each student must plan his own independent work, based on his capabilities and priorities.

In the learning process, independent work with a source of information plays a vital role. Learning to work with such sources is a student's priority task.

7. Appraisal Fund

7.1 Methods for monitoring and assessing learning outcomes

Students studying in the discipline "Physical Education and Sports" in the main and special departments and who have mastered the curriculum fulfill the credit requirements for physical education with the corresponding entry "passed" in the test and examination sheet.

The criterion for successfully mastering the educational material is the expert assessment of the teacher, taking into account the regularity of attendance at compulsory training sessions, knowledge of the theoretical and methodological sections of the program and the performance of established tests of general physical fitness.

Students who have attended at least 80% of classes are allowed to perform test exercises. Students who have not fulfilled this requirement are allowed to perform test exercises only after completing the missing number of lessons.

Students perform 5 tests to monitor general physical fitness (Appendix No. 1), which are selected based on the capabilities of the sports base where they are conducted.

The differentiated grade for the semester is determined by the level of physical fitness achieved by the student based on the average arithmetic grade for all tests, provided that each of them is completed no lower than two points (Table No. 1). An exception for certain tests can be made for students who have insufficient primary physical fitness, excess or lack of body weight. In this case, two points are given only for the presence of a positive shift compared to the initial indicator in this test exercise. Differentiated assessment is conditional and is only motivational in nature.

Students who are members of university national teams in sports, who regularly take part in the educational and training process and various competitions, upon the

recommendation of the coaches who prepare them, can be exempted from taking tests and evaluated based on the results of performances for the corresponding national team.

Table No. 1

Evaluation of tests of general physical and sports-technical training	Satisfactorily (“passed”)	Fine (“passed”)	Great (“passed”)
Average test scores in points	5.0	7.0	8.0

Students, temporarily exempted from performing physical exercises as part of practical classes in physical culture and sports for a period of more than one month for medical reasons, are assessed based on the results of mastering the discipline program in the distance learning system.

When introducing online learning, the criterion for the success of mastering educational material is the total assessment of the results of studying the electronic educational resource in the discipline, including testing knowledge of the theoretical and methodological sections of the program and completing tasks for mastering techniques in methodological and practical classes.

7.2 Scale and criteria for assessing learning outcomes

An indicator for assessing competencies at various stages of their formation is the achievement by students of the planned learning outcomes in the discipline “Physical Culture and Sports”.

Index	Evaluation criteria			
	2	3	4	5
know: scientific and practical foundations of physical culture and a healthy lifestyle.	The student demonstrates a complete absence or insufficient compliance of the following knowledge: scientific and practical foundations of physical culture and a healthy lifestyle.	The student demonstrates incomplete compliance with the following knowledge: scientific and practical foundations of physical culture and a healthy lifestyle. Significant mistakes are made, insufficient	The student demonstrates partial compliance with the following knowledge: scientific and practical foundations of physical culture and a healthy lifestyle, but minor errors, inaccuracies, and difficulties in analytical	The student demonstrates full compliance with the following knowledge: scientific and practical foundations of physical culture and a healthy lifestyle, freely operates with acquired knowledge.

		knowledge is manifested, according to a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations.	operations are allowed.	
be able to: use creative means and methods of physical education for professional and personal development, physical self-improvement, formation of a healthy image and lifestyle.	The student does not know how, or is insufficiently able to use creative means and methods of physical education for professional and personal development, physical self-improvement, and the formation of a healthy image and lifestyle.	The student demonstrates incomplete compliance with the following skills: creatively use the means and methods of physical education for professional and personal development, physical self-improvement, and the formation of a healthy image and lifestyle. Significant mistakes are made, insufficient skills are manifested, according to a number of indicators, the student experiences significant difficulties in operating skills when transferring them to new situations.	The student demonstrates partial compliance with the following skills: creatively use the means and methods of physical education for professional and personal development, physical self-improvement, and the formation of a healthy image and lifestyle. The skills have been mastered, but minor errors, inaccuracies, and difficulties are allowed during analytical operations and transfer of skills to new, non-standard situations.	The student demonstrates full compliance with the following skills: creatively use the means and methods of physical education for professional and personal development, physical self-improvement, and the formation of a healthy image and lifestyle. Fluently operates with acquired skills and applies them in situations of increased complexity.

own: means and methods of strengthening individual health, physical self-improvement, values of physical culture of the individual for successful socio-cultural and professional activities.	The student does not have or does not have sufficient knowledge of the means and methods of strengthening individual health, physical self-improvement, and the values of physical culture of the individual.	The student does not fully master the means and methods of strengthening individual health, physical self-improvement, and the values of physical culture of the individual; significant mistakes are made; insufficient proficiency in skills is manifested in a number of indicators; the student experiences significant difficulties when applying skills in new situations.	The student partially knows the means and methods of strengthening individual health, physical self-improvement, the values of physical culture of the individual, the skills have been mastered, but minor errors, inaccuracies, and difficulties in analytical operations and transfer of skills to new, non-standard situations are allowed.	The student has full knowledge of the means and methods of strengthening individual health, physical self-improvement, the values of physical culture of the individual, and freely applies the acquired skills in situations of increased complexity.
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Scale for assessing the results of intermediate certification and their description:

Interim certification form: test.

Interim certification of students in the form of a test is carried out based on the results of completing all types of academic work provided for by the curriculum in the discipline “Physical Education”, while taking into account the results of ongoing monitoring of progress during the semester. Assessment of the degree to which students have achieved the planned learning outcomes in the discipline “Physical Education” is carried out by the teacher leading classes in the discipline “Physical Education” using the method of expert assessment. Based on the results of the intermediate certification in the discipline “Physical Education”, a grade of “pass” or “fail” is given.

Only students who have completed all types of academic work provided for in the work program for the discipline “Physical Culture and Sports” (knowledge of the theoretical and methodological-practical sections, regular attendance at educational and training sessions, performing tests to monitor general physical fitness) are allowed to take part in the intermediate certification.

Grading scale	Description
Passed	All types of educational work provided for by the curriculum have been completed. The student demonstrates compliance of knowledge, abilities, and skills with those given in the tables of indicators, operates with acquired knowledge, abilities, skills, and applies them in situations of increased complexity. In this case, minor errors, inaccuracies, and difficulties during analytical operations and the transfer of knowledge and skills to new, non-standard situations may be made.
Not accepted	One or more types of educational work provided for by the curriculum have not been completed. The student demonstrates incomplete compliance of knowledge, abilities, skills with those given in the tables of indicators, significant mistakes are made, a lack of knowledge, abilities, skills is manifested in a number of indicators, the student experiences significant difficulties in operating knowledge and skills when transferring them to new situations.

7.3 Evaluation tools

7.3.1. Current control

No.	COMPETENCE	INDICATOR	List of components	Technology for developing competence	Form of assessment tool**	Degrees of levels of mastering competencies
1	UK-7	<i>Capable maintain the proper level of physical fitness to ensure full social and professional activities</i>	know: - scientific and practical foundations of physical culture and a healthy lifestyle. be able to: - use creative means and methods of physical education for professional and personal development, physical self-improvement, formation of a healthy image and lifestyle. own:	methodological, practical and educational training sessions, independent work	Oral survey, interview, Testing	A basic level of Understands: - the influence of the health-improving system of physical education on health promotion, prevention of occupational diseases and bad habits; - methods of monitoring and assessing physical development and physical fitness; - rules and methods for planning individual lessons of various target orientations. Increased level -able to use acquired knowledge and skills in practical activities and

			- means and methods of strengthening individual health, physical self-improvement, personal physical culture values for successful socio-cultural and professional activities.			everyday life to improve performance, maintain and improve health, prepare for professional activities and service in the Armed Forces of the Russian Federation; - selects the optimal methods and means of physical education for professional and personal development.
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7.3.2. Interim certification

OS No.	Name of the assessment tool	Brief description of the evaluation tool	Submission of the assessment tool to the Federal Fund
1	Oral survey interview	A means of control, organized as a special conversation between a teacher and a student on topics related to the discipline being studied, and designed to determine the amount of knowledge of the student in a certain section, topic, problem, etc.	Topics of the theoretical section of the discipline
2	Testing	A set of exercises to determine the level of general physical fitness of a student. Bank of questions for testing knowledge of theoretical and methodological sections of the discipline.	Test exercise fund, test question bank

*Appendix No. 1
to the work program*

**Fund of test exercises for assessing the physical fitness of students of the
main educational department**

Physical qualities	Tests	Boys					Girls				
		SCORE									
		2	4	6	8	10	2	4	6	8	10
Speed capabilities	60m run (s)	9.9	9.4	8.9	8.4	7.9	12.3	11.5	10.7	9.9	9.2
	100m sprint (s)	16.2	15.5	14.8	14.1	13.2	19.9	18.9	17.9	16.9	15.8
Endurance	2000 m run (min, s)	-	-	-	-	-	14:55	13:45	12:25	11:10	9:45
	3000 m run (min, s)	17:40	16:30	15:20	14:10	12:20	-	-	-	-	-
	Skiing 3000 m (min, s)	-	-	-	-	-	24:10	22:20	20:30	18:40	16:40
	Skiing 5000 m (min, s)	32:40	30:20	28:00	25:45	23:40	-	-	-	-	-
	3 km cross- country (cross- country running) (min, s)	-	-	-	-	-	22:35	20:55	19:25	17:35	16:05
	5 km cross- country (cross- country running) (min, s)	31:00	29:00	27:00	25:00	23:00	-	-	-	-	-
Force	Pull-ups from hanging on a high bar (number of times)	2	5	8	12	15	-	-	-	-	-
	Pull-ups from hanging while lying on a low bar 90 cm (number of times)	-	-	-	-	-	2	6	10	14	20
	Bending and extension of the arms while lying on the floor (number of times)	eleven	18	25	32	43	2	5	8	12	17

Speed and power capabilities	Standing long jump with two feet push (cm)	153	173	192	213	233	128	143	157	173	188
	Raising the body from a supine position (number of times in 1 minute)	20	27	35	41	51	20	25	32	37	45
Flexibility	Bend forward from a standing position on a gymnastic bench (from the level of the bench – cm)	4	5	6	8	13	5	6	7	9	16
Additional tests	Jumping rope on two legs (number of times in 1 minute)	70	80	90	100	110	80	90	100	110	120
	Squats on two legs (number of times in 2 minutes)	80	85	90	95	100	60	65	70	75	80
	Shuttle run 6m (number of times in 1 min.)	25	26	27	28	29	23	24	25	26	27

Fund of test exercises for assessing the physical fitness of students of the special educational department

Tests	Boys					Girls				
	SCORE									
	2	4	6	8	10	2	4	6	8	10
1. Tapping test, s	≥ 8.9	8.4–8.8	7.4–8.3	6.9–7.3	≤ 6.8	≥ 11.6	10.5–11.5	9.2–10.4	8.1–9.1	≤ 8
2. Raising the body from a supine position, hands on the shoulder blades, number of times in 30 s	≤ 15	16–19	20–24	25–29	≥ 30	≤ 12	13–15	16–20	21–23	≥ 24
3. Hanging pull-ups on a low bar, number of times	≤ 16	20–17	21–26	27–30	≥ 31	≤ 1	2–3	4–5	6–7	≥ 8
4. Medicine ball throw from behind the head from a sitting position (m=2 kg), m	≤ 3.79	3.80–4.29	4.30–4.89	4.90–5.19	≥ 5.20	≤ 2.00	2.01–2.49	2.50–3.00	3.01–3.49	≥ 3.50

5. Bend forward from a sitting position, cm	≤ 0	1–8	9–16	17–23	≥ 24	≤ 0	1–10	11–18	19–25	≥ 26
6. Stability on one leg, with	≤ 2	3–6	7–15	19–23	≥ 24	≤ 2	3–6	7–15	19–23	≥ 24
7. Ruffier test, e.g.	15.1 – 20.0	10.1 – 15.0	5.1– 10.0	0.1– 5.0	≤ 0	15.1 – 20.0	10.1 – 15.0	5.1– 10.0	0.1– 5.0	≤ 0

Note:

Mandatory tests are carried out at the beginning of the academic year as initial ones, characterizing the level of physical fitness of a freshman upon entering the university, and at the end of the semester - as determining a shift in the level of physical fitness.

At the beginning of the academic year, students are tested in exercises that do not require special training and do not create a large load on the cardiovascular and respiratory systems.