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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
Vice-President
for International Affairs
_____ /Yu.D. Davydova/
"16" 02 2023

Dean of the Faculty
of Economics and Management
_____ /A.V. Nazarenko/
"16" 02 2023

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
Half-time

Moscow 2023

Разработчик(и):

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Согласовано:

Заведующий кафедрой
«Физическое воспитание», к.п.н. /А.А. Плешаков/

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

aimmastering the discipline "Physical culture and sport" is the formation of physical culture of the individual and the ability to use various means of physical culture, sports and tourism for the preservation and promotion of health, psychophysical training and self-preparation for future life and professional activities.

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

- understanding of the social significance of physical culture and its role in personal development and preparation for professional activities;
- knowledge of biological, psychological, pedagogical and practical foundations of physical culture and a healthy lifestyle;
- formation of a motivational and value attitude to physical culture, attitudes towards a healthy lifestyle, physical improvement and self-education of the habit of regular physical exercises and sports;
- mastering the 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;
- acquisition of personal experience in increasing motor and functional capabilities, providing general and professional-applied physical fitness for the future profession and everyday life;
- creation of a basis for creative and methodically substantiated 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 the means and methods of physical education for professional and personal development, physical self-improvement, the formation of a healthy lifestyle and lifestyle.

own:

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

Training in the discipline "Physical culture and sport" is aimed at developing the following competencies among students:

Code and name of competencies	Competence achievement indicators
UK-7 Able to maintain the proper level of physical fitness to ensure full-fledged social and professional activities	IUK-7.1. Competently chooses health-saving methods to maintain a healthy lifestyle, taking into account the physiological characteristics of the body and the conditions for the implementation of professional activities IUK-7.2. Supports an optimal level of physical activity to ensure full social and professional activities IUK-7.3. Complies with the norms of a healthy lifestyle in various life situations and in professional activities

2. The place of discipline in the structure of the educational program

The discipline "Physical Education and Sports" is one of the academic disciplines of the mandatory part of the basic cycle (B1) of the main educational program of the bachelor's / specialist's degree.

"Physical Education and Sports" is interconnected logically and content-methodically with the following disciplines of the OP:

- History of Russia;
– Philosophy;
– First Aid and Emergency Response.

3. Structure and content of the discipline

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

3.1 Types of educational work and labor intensity
(according to the forms of education)

3.1.1. Half-time education

No. p / p	Type of study work	Number of hours	Semesters	
	Auditory lessons	**10**	1	
	Including:			
1	Lectures			
2	Seminars/practical classes	10	1	
3	Laboratory studies			
	Independent work	**62**	1	
	Including:			
1	Using distance learning technologies	62	1	
	Intermediate certification		1	
	pass		1	
	Total	**72**	1	

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

3.2.1. Half-time education

No. p / p	Sections/topics disciplines	Labor intensity, hour					
		Total	Classroom work				Independent work
			Lectures	Seminar / practical training	Laboratory studies	Practical training	
1.	**Physical culture and sports in the 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 the method of self-assessment of its formation	2		2			
2.	**Healthy image and lifestyle of students**	**4**					4
2.1	The structure of health and the criteria for managing human health	1					1
2.2	The concepts of a healthy lifestyle and a healthy lifestyle of students and its components	1					1
2.3	Evaluation of the mode of work and rest	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 impact on them of physical culture and sports.	1					1
3.3	Psychophysiological features 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-control over 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 system of physical education**	**35**		**2**			33
4.1	General issues of the purposeful pedagogical process of physical education	1					1
4.2	The development of physical and the formation of mental qualities inthe 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 agility 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 physical fitness of students	1					1
5.	**Fundamentals of the methodology of independent physical exercises**	**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 compiling a program of independent training sessions	2		2			
6.	**Sports training in the system of physical education**	**6**					6
6.1	Sports: mass, high achievements, Olympic, student. The main groups of sports.	1					1
6.2	Study of the need and attitude to physical culture and sports activities.	1					1
6.3	Individual choice of sports or physical activity	1					1
6.4	Evaluation of special physical fitnessin your chosen sport.	2					2
6.5	Means and methods of muscle relaxation in sports	1					1
7.	**Professionally applied physical training of students**	**5**		**2**			3
7.1	Fundamentals of professionally 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	1					1

	specified conditions and the nature of work						
7.4	Methods for regulating the psycho-emotional state	1					1
	Total	**72**		**10**			**62**

3.3 The content of the discipline

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

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

Normative-legal bases of the discipline "Physical culture and sport" in educational institutions of the Russian Federation. Physical culture and sport 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 a part of universal culture. The structure of physical culture. Non-special physical education. Sport. physical recreation. Motor rehabilitation.

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

The study of structural elements and levels of formation of the physical culture of the individual. Mastering the methodology of self-assessment of the level of formation of physical culture of the individual.

Section 2. Healthy lifestyle and lifestyle of students

Topic 1. The structure of health and the criteria for managing human health

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

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

The concept of a healthy lifestyle and a healthy lifestyle of students and its components. Mode of work and rest. Rational nutrition Personal hygiene. hardening. Optimum physical activity. Rejection of bad habits. Culture of interpersonal relations.

Topic 3. Assessment of the regime of work and rest

Studying the basics of organizing a rational day regimen for students. Mastering the methodology for assessing your mode of work and rest.

Topic 4. Assessment of human motor activity

The study of motor activity as a fundamental factor in preventing the occurrence of non-communicable diseases. Acquaintance 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 culture and sports in the socialization of the individual.The biological component of physical culture. Biological patterns of the positive impact of physical exercises on the human body, physiological and biochemical laws of this phenomenon. An organism is a complex biological system with no less complex evolutionary mechanisms of regulation. Examples of self-regulation at different levels of organization of living matter. Comparison of the nervous and humoral mechanisms of regulation in the body.

Topic 2. Anatomical systems of the body and the impact on them of physical culture and sports.

The positive effect of physical exercises on the following systems of the body: bone (human skeleton), muscle, blood system, cardiovascular, respiratory, digestive, excretory, nervous, endocrine, system of analyzers. Environmental factors affecting living organisms. Substances necessary for its life, as well as irritants (useful and harmful), which violate the constancy of the internal environment.

Topic 3. Psychophysiological features of students' work

Mastery of the future profession. Educational-cognitive and labor activity of students. Physical and mental labor. The content of the physiological processes of working capacity, fatigue, fatigue, overwork, recovery. Hypokinesia and hypodynamia. Biological rhythms.

Topic 4. Physiological indicators of fitness

Energy processes in muscles and health training. Characteristics of the energy systems of the body 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 a maximum load. Economization of functions. Reaction to standard (testing) loads. Indicators of fitness during the performance of the maximum load.

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

The value of physical development at different stages of human ontogenesis. Basic methods for determining and evaluating physical development. Somatoscopy. Body type. Influence of physical culture and sports on somatoscopy parameters. Measurement of anthropometric indicators. Description of the main anthropometric indicators. Calculation of anthropometric indices.

Topic 6. Methods of self-control over the functional state of the body

Self-control of the functional state of the cardiovascular system. Heart rate as an important indicator of self-control. Arterial pressure as one of the indicators of

the functional state of the cardiovascular system. Method for conducting a test with a standard load. Respiratory 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 somatic health. Express assessment according to G.L. Apanasenko

Ability to quantify human health.Methods for quantitative assessment of somatic health. Benefits of assessing the level of somatic health according to G.L. Apanasenko. The methodology for conducting an express assessment of the level of somatic health according to G.L. Apanasenko. Formationhealth-improving training programs in accordance with the level of somatic health.

Section 4. General physical training in the system of physical education

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

Methodical principles of physical education. The concept of the methods of physical education and their structural basis. Fundamentals of learning to move. Motor skills and abilities as a subject of training in physical education. Means of physical education.

Topic 2. The development of physical and the formation of mental qualities in the process of physical education

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

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 education of 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 educating speed. Age features of education of 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 power abilities. Means and methods of education of force. Force measurement methods. 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 education of flexibility. Methods for measuring flexibility.

Topic 7. Development of agility and coordination abilities

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

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

The structure of physical fitness. Physical readiness index. Methodology for controlling 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 physical fitness of students

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

Section 5. Fundamentals of the methodology of independent physical exercises

Topic 1. Organization of independent physical exercises

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

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

Selection and direction of exercises. The sequence of exercises in the complex. Description of exercises. gymnastic terminology. Intensity and dosage of exercises.

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

Fundamentals of planning training sessions. The purpose (direction) of the program of independent training sessions. The choice of means of physical culture for the implementation of the program of independent training sessions. Health training rules. Independent planning and implementationtraining sessions.

Section 6. Sports training in the system of physical education

Theme 1. Sports: mass, high achievements, Olympic, student. The main groups of sports.

Sports training. The purpose of sports training. The structure of the athlete's preparedness. Characteristics of technical, physical, tactical and mental training. Features of elite sports and mass sports. Sports classification, its structure. Student sports. Organizational forms of sports-mass work. The system of student sports competitions. Public student sports organizations. international sports movement. Olympic Games and Universiade.

Topic 2. Study of the need and attitude to physical culture and sports activities

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

Topic 3. Individual choice of sports or physical activity

Substantiation of the individual choice of sports (or systems of physical exercises) among students. Brief psychophysiological characteristics of the main groups of sports and systems of physical exercises.

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

Special physical training (SFP).Goals and objectives of the SFP. Classification of physical exercises. Evaluation of the 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 stretching exercises. Fundamentals of self-massage technique. Myofascial release (MFR).

Section 7. Professional and applied physical training of students

Topic 1. Fundamentals of professional-applied physical training

Definition of professional-applied physical training, its goals. List of tasks. Applied knowledge, skills, psychophysical and special qualities. The choice of means of professionally applied physical training, taking into account the peculiarities of the educational process. Prevention of occupational diseases and injuries by means of 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. Primary idea of the profession. The study of professional inclinations. Description of the profession using the classification according to Klimov E.A. The study of the type of nervous system. The study of special professional abilities.

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

Optimal organization of work. Industrial physical culture. Forms of industrial gymnastics: introductory gymnastics, physical education pause, physical education minute. Rules for the selection of exercises in the complexes of industrial gymnastics.

Topic 4. Methods for regulating the psycho-emotional state

Studying the possibility of regulating the psycho-emotional state in the process of educational and labor activity. Mastering the method of regulating the psycho-emotional state by relaxation techniques.

3.4 Topics of seminars / practical and laboratory classes

3.4.1. Seminars/practical classes

The practical material consists of two sections:

1. methodical - providing 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, which provides the opportunity for independent, purposeful and creative use of physical culture and sports.

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

Students who have passed a medical examination and have determined their health group (basic, preparatory, special "A" or "B") are allowed to practice. An exception is made for students of the 1st semester, for whom this rule is valid immediately after passing the medical examination. Before determining the health group, students are offered physical activity in a gentle mode. The data of the medical form 086 / y and a survey of students about their state of health are taken into account.

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 size of the 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 culture, sports and professional-applied physical training.

The means of the practical section without fail include certain types of athletics, sports games, exercises of professionally applied physical training. In the practical section, physical exercises from various sports, health systems of physical exercises can be used.

In the main department, classes are held 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 classes are held.

The special educational department enrolls students assigned to the special medical group "A" or "B" for health reasons. The number of study groups is no more than 10 people.

Practical educational material (including credit requirements and standards) for the study groups of the 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 shortcomings in physical

development. A special place is given to the formation of knowledge and skills of self-control, self-massage, the skills of independent use of physical exercises in the organization of 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 the appropriateness of the exercises used and their dosages to the capabilities of each individual student.

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

Students who are exempted from practical classes for a long period of time carry out a 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 12/12/1993. 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. Decrees. On approval of the Regulations on the All-Russian physical culture and sports complex "Ready for Labor and Defense" (TRP): 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 the 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 a higher educational institution: textbook / A.A. Pleshakov, M.A. Semenov. - M. : Moscow Polytech, 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: teaching aid / M.A. Semyonova, E.E. Shcherbakova, M.V. Zheleznyakov. - Moscow: Moscow Polytechnic University, 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 "KnoRus Publishing House", 2020. - 424 p.
4. Gilev, G. A. Physical education of students: Textbook / G. A. Gilev, A. M. Katkova; Moscow Pedagogical State University. - Moscow: Moscow State Pedagogical University, 2018. - 336 p.https://elibrary.ru/item.asp?id=37101024

4.3 Additional literature

1. Manzheley, I. V. Physical culture: competence-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. Independent work of a student in physical culture: a textbook for universities / VL Kondakov [and others]; edited by V. L. Kondakov. — 2nd ed., corrected. 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: a 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., tab. – Access mode: by subscription. – URL:https://biblioclub.ru/index.php?page=book&id=441285
7. Physical culture: a textbook for universities / E. V. Koneeva [and others]; 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 sport at the 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 [and others]; ed. 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: a textbook for universities / A. A. Zaitsev [and others]; 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.https://online.mospolytech.ru/course/view.php?id=3212
2.https://online.mospolytech.ru/course/view.php?id=3732
3.https://online.mospolytech.ru/course/view.php?id=4115
4.https://online.mospolytech.ru/course/view.php?id=4117
5.https://online.mospolytech.ru/course/view.php?id=4436

4.5 Licensed and Free Software

- Microsoft Windows;
- Microsoft Office software;
- Integrated Anti-Virus Protection System Kaspersky
- Dr.Web anti-virus program;
- 7-ZIP - archiverhttps://7-zip.org.ua/ru/

4.6 Modern professional databases and information reference systems

1. http://www.fismag.ru/Website of the journal Physical culture and sport
2. http://kzg.narod.ru/Healthy Life Culture magazine website
3. http://teoriya.ru/ru/taxonomy/term/2The site of the journal "Physical culture: upbringing, education, training"

4. http://teoriya.ru/ru/taxonomy/term/3The site of the journal "Theory and Practice of Physical Culture"
5. http://www.afkonline.ru/biblio.htmlThe site of the journal "Adaptive physical culture (AFC).
6. https://elibrary.ru/- Scientific electronic library
7. Official Internet portal of the database of legal informationhttp://pravo.gov.ru.
8. Portal Single window of access to educational resourceshttp://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

To fulfill the tasks of the discipline "Physical Culture and Sports" the following sports facilities are used at the university:

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

Gym No. 2 (B. Semenovskaya st., 40A), gymnastics, with an area of 198 sq.m., equipped with gymnastic apparatus (crossbar, bars, rings, horse, acrobatic track), a set of simulators for various muscle groups, and barbells. The gym has three locker rooms, two showers, and a teaching room.

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

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

1) power all-around hall, with an area of 114 sq.m., equipped with a set of simulators, barbells, kettlebells, dumbbells;

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

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

an area of 144 sq.m., equipped with a set of simulators, barbells, kettlebells, dumbbells.

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

Gym No. 9 (Avtozavodskaya st., 16, building 4, room3501), area 30 sq.m. The recreational physical education hall is equipped with two locker rooms, pressure measuring devices, gymnastic rugs, mats, hoops, dumbbells, gymnastic sticks.

Sports complex on Avtozavodskaya (Avtozavodskaya st., 16, room2802)

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

1) **Game room**, with an area of 450 sq.m. Available balls for playing volleyball, basketball, tennis, badminton.

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

Sports complex "Izmailovo" (st. 11th Parkovaya, 36, building 2) with a total area of 1276 sq.m. with utility rooms (2 locker rooms with showers, 2 toilets, 3 teaching rooms, laboratory room, inventory room):

1) **Game room**, with an area of 365 sq.m.

2) **Gym**, with an area of 110 sq.m., equipped with a set of simulators for various muscle groups and barbells.

3) **Hall for rhythmic gymnastics** - 90 sq.m., equipped with musical arrangement, mirrors and sports equipment.

4) **Hall for general physical training and SMG** - 144 sq.m., equipped with music, mirrors and sports equipment.

5) **Darts room** - 20 sq.m., equipped with sports equipment.

6) **Hall**, with an area of 96 sq.m., with the possibility of installing tables for table tennis.

7) **Outdoor sports ground**area of 800 sq.m. with artificial turf.

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

1) **Athletic gymnastics hall**, equipped with equipment and inventory for athletic gymnastics and power sports (complex training devices, dumbbells, barbells, pancakes, kettlebells);

2) **Weightlifting Hall**, equipped with equipment and inventory for weightlifting, power triathlon and kettlebell lifting (platform, racks, bars, pancakes, kettlebells);

3) **Hall of Physical Rehabilitation**, 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) **Hall of sports games**, equipped with equipment and inventory for practicing sports games (volleyball stands, basketball backboards, basketballs and volleyballs);

6) **Table tennis hall**, equipped with equipment and supplies for table tennis (table tennis tables, nets, protective bumpers, rackets and table tennis balls).

7) **Combat sports hall**, equipped with equipment and inventory for practicing martial arts (wrestling carpet, lining mats, rubber expanders, boxing paws);

8) **Aerobics hall**, equipped with equipment and supplies for aerobics (step platforms, dumbbells, gymnastic mats, jump ropes).

6. Guidelines

6.1 Methodological recommendations for the teacher on the organization of training

The main requirement for teaching the discipline is a creative, problem-based interactive interactive approach that allows increasing 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 order of its study, to reveal the place and role of the discipline in the system of sciences, its practical significance, to bring to students the requirements for successfully passing the intermediate certification, to answer the questions that arise.

The purpose of practical classes is to provide control over the assimilation of educational material by students, the expansion and deepening of the knowledge gained by them in the study of theoretical material and in the course of independent work. Increasing the effectiveness of practical classes is achieved, among other things, by creating a creative environment.

The teacher needs to regularly keep a log of academic work and student attendance, find out the reasons for the absence of students in the classroom.

6.2 Guidelines for students on mastering the discipline

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

- study of theoretical material, preparation for training sessions,
- mastering the 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 the student cannot be a highly qualified bachelor/specialist.

The student must remember that self-study should be carried out regularly. It is important to make maximum efforts, will and work with full load from the first day.

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

In the learning process, the most important role is played by independent work with the source of information. Learning how to work with such sources is the priority task of the student.

7. Evaluation fund

7.1 Methods for monitoring and evaluating learning outcomes

Students studying in the discipline "Physical culture and sport" in the main and special departments and who have mastered the curriculum, fulfill the test requirements for physical culture with the corresponding entry "passed" in the test sheet.

The criterion for the success of mastering the educational material is the expert assessment of the teacher, taking into account the regularity of attending 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 the 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 classes.

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

The differentiated grade for the semester is determined by the level of physical fitness achieved by the student according to the arithmetic average grade for all tests, provided that each of them is not lower than two points (Table No. 1). An exception for individual tests can be made for students with insufficient primary physical fitness, excess or lack of body weight. At the same time, two points are given only for the presence of a positive shift compared to the baseline in this test exercise. A differentiated assessment is conditional and has only a motivational character.

Students who are members of the university teams in sports, regularly participating in the training process and various competitions, on the proposal of the coaches who train them, can be exempted from taking tests and evaluated based on the results of performances for the corresponding national team.

Table #1

Evaluation of tests of general physical and sports and technical training	Satisfactorily ("read")	Fine ("read")	Great ("read")
Average score of tests in points	5.0	7.0	8.0

Students who have been released from practical classes for a long time are evaluated based on the results of mastering the discipline program in the distance learning system.

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

7.2 Scale and criteria for evaluating learning outcomes

An indicator of competency assessment 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 the 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, lack of knowledge is manifested, for a number of indicators, the student experiences significant difficulties in operating knowledge when transferring it to new situations.	The student demonstrates partial compliance with the following knowledge: the scientific and practical foundations of physical culture and a healthy lifestyle, but minor errors, inaccuracies, and difficulties in analytical operations are allowed.	The student demonstrates full compliance with the following knowledge: the scientific and practical foundations of physical culture and a healthy lifestyle, freely operates with the acquired knowledge.

be able to: use creatively the means and methods of physical education for professional and personal development, physical self-improvement, the formation of a healthy lifestyle and lifestyle.	The student does not know how or insufficiently knows how to creatively use the means and methods of physical education for professional and personal development, physical self-improvement, the formation of a healthy lifestyle and lifestyle.	The student demonstrates incomplete compliance with the following skills: to use creatively the means and methods of physical education for professional and personal development, physical self-improvement, the formation of a healthy lifestyle and lifestyle. Significant mistakes are made, lack of skills is manifested, for a number of indicators, the student experiences significant difficulties in operating with 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, the formation of a healthy lifestyle and lifestyle. Skills are mastered, but minor errors, inaccuracies, difficulties in analytical operations, transferring skills to new, non-standard situations are allowed.	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, the formation of a healthy lifestyle and lifestyle. Freely operates with acquired skills, applies them in situations of increased complexity.
own: means and methods of strengthening individual health, physical self-improvement, the values of physical culture of the individual for successful socio-cultural and professional	The student does not own or insufficiently owns the means and methods of strengthening individual health, physical self-improvement, the values of physical culture of the individual.	The student does not fully own the means and methods of strengthening individual health, physical self-improvement, the values of physical culture of the individual, significant mistakes are made, there is a lack of skills in a number of	The student partially owns the means and methods of strengthening individual health, physical self-improvement, the values of the physical culture of the individual, the skills are mastered, but minor errors, inaccuracies, difficulties are made in analytical operations,	The student fully owns the means and methods of strengthening individual health, physical self-improvement, the values of the physical culture of the individual, freely applies the acquired skills in situations of increased complexity.

activities.		indicators, the student experiences significant difficulties in applying skills in new situations.	transferring skills to new, non-standard situations.	

The scale of assessment of the results of the intermediate certification and their description:

Form of intermediate attestation: test.

Intermediate attestation of students in the form of a test is carried out based on the results of the implementation of all types of educational work provided for by the curriculum for the discipline "Physical Education", while taking into account the results of current monitoring of progress during the semester. Assessment of the degree of achievement by students of the planned learning outcomes in the discipline "Physical Education" is carried out by the teacher conducting classes in the discipline "Physical Education" by the method of expert assessment. According to the results of the intermediate certification in the discipline "Physical Culture", the mark "passed" or "failed" is given.

Only students who have completed all types of educational work provided for by the work program in the discipline "Physical Culture and Sports" (knowledge of the theoretical and methodological and practical sections, regular attendance of training sessions, performance of general physical fitness control tests) are allowed to intermediate certification.

Evaluation scale	**Description**
Passed	All types of educational work provided for by the curriculum were completed. The student demonstrates the correspondence of knowledge, skills and abilities given in the tables of indicators, operates with the acquired knowledge, skills, skills, applies them in situations of increased complexity. In this case, minor errors, inaccuracies, difficulties in analytical operations, transferring knowledge and skills to new, non-standard situations can be made.

Not credited	One or more types of educational work provided for by the curriculum have not been completed. The student demonstrates incomplete correspondence of knowledge, skills and abilities given in the tables of indicators, significant errors are made, the lack of knowledge, skills and abilities 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.	COMPETENC		List of components	Competence formation technolo	Assessment Tool Form**	Degrees of levels of development of competencies
	INDEX	FORMULATION				
1	UK-7	***Capable*** *maintain the proper level of physical fitness to ensure full-fledged social and professional activities*	**know:** - scientific and practical foundations of physical culture and a healthy lifestyle. **be able to:** - creatively use the means and methods of physical education for professional and personal development, physical self-improvement, the formation of a healthy lifestyle and lifestyle. **own:** - means and methods of strengthening individual health, physical self-improvement, personal physical culture values for successful socio-cultural and professional activities.	methodical-practical and training sessions, independent work	Oral interview 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 control and evaluation of physical development and physical fitness; - rules and methods of planning individual lessons of various target orientation. **Enhanced level** -is able to use the acquired knowledge and skills in practical activities and everyday life to improve efficiency, maintain and improve health, prepare for professional activities and service in the Armed Forces of the Russian Federation; - chooses the best methods and means of physical education for professional and personal development.

7.3.2. Intermediate certification

OS number	Name of the evaluation tool	Brief description of the evaluation tool	Presentation of the evaluation tool in the FOS
1	Oral interview 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 clarify the amount of knowledge of the student in a particular 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 the student. Bank of questions for testing knowledge of the theoretical and methodological sections of the discipline.	Fund of test exercises, bank of test questions

Application No. 1
to work program

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

Tests	Youths					girls				
	BALL									
	2	4	6	8	10	2	4	6	8	10
1. Tilt forward from a standing position on a support (below the bench - cm)	4	5	6	7	13	6	7	8	elev en	16
2. Long jump from a place with a push of two legs (cm)	195	205	215	230	240	150	160	170	180	195
3. Pull-ups on the high bar (times) Weight up to 85 kg	5	7	9	10	13	-	-	-	-	-
Weight 85 kg or more	2	4	7	9	elev en	-	-	-	-	-
Hanging on bent arms (sec)	-	-	-	-	-	5	8	10	12	15
4. Raising the body from a supine position for 1 min. (once). (girls - with leg fixation)	40	45	50	55	60	20	25	thirt y	35	40
5. Flexion and extension of the arms from the floor in 2 minutes. Pause between push-ups no more than 5 seconds. (once). (girls - emphasis on the knees)	35	40	45	50	60	15	20	25	thirt y	40
6. Jumping rope on two legs in 1 minute (one time)	70	80	90	100	110	80	90	100	110	120
7. Squats on two legs for 2 minutes. (once)	80	85	90	95	100	60	65	70	75	80
8. Shuttle run 6m for 1 min. (once)	25	26	27	28	29	23	24	25	26	27

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

Tests	Youths					girls				
	BALL									
	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. Lifting 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 the low bar, number of times	≤ 16	20–17	21–26	27–30	≥ 31	≤ 1	2–3	4–5	6–7	≥ 8
4. Throwing a stuffed ball over 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. Tilt 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, s	≤ 2	3–6	7–15	19–23	≥ 24	≤ 2	3–6	7–15	19–23	≥ 24
7. Ruffier test, c.u.	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:

Compulsory tests are held 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.