



PHYSIOLOGY OF PHYSICAL EDUCATION AND SPORT

Pulatova Mavlyuda Djalalovna

Candidate of Biological Sciences Assocaite

Professor of Uzbek State University of Physical Education and Sport.

Abstract

This article is devoted to such a discipline and science at the same time as sports physiology. For for a long time, such scientists as N.A. Agadzhanyan, T.M. Lyuboshenko, A.S. Solodkov and many others studied this science and came to the conclusion that it is important in studying the physiology of an athlete in order to select a competent load. To select a uniform physical load, it is necessary to take into account the periods: pre-work, work and after work, in which a certain motor load and exercises are provided.

Keywords: sports physiology, fundamental sciences, human physiology, bicycle ergometer, treadmill, classification of physical exercises, athlete's psychology, pre-work period, working period, post-work period.

Such a science as sports physiology has an important place in discipline "physical culture", as it is the basis of the fundamentals in the study of the human body in training activities. Sports physiology is a special section of human physiology that studies changes in body functions and their mechanisms under the influence of muscular (sports) activity and substantiates practical measures to improve its efficiency [3]. Sports physiology contains two relatively independent and at the same time interconnected sections. The first section includes general sports physiology, which studies the physiological foundations of adaptation to physical activity and the body's reserve capabilities, functional changes and body conditions during sports activities, as well as the athlete's physical endurance, fatigue and recovery in sports activities. These disciplines include biology, human and animal physiology, chemistry and physics. The second section considers particular sports physiology, namely the physiological classification of physical exercises, the mechanisms and patterns of formation and development of motor qualities and skills, sports performance in special environmental conditions, the physiological characteristics of the training of women and children of different ages, the physiological foundations of mass forms of recreational physical culture. This includes such disciplines as anatomy, biochemistry, biomechanics, hygiene, psychology, pedagogy, physiotherapy, sports medicine [4].

Sports physiology has a scientific basis, thanks to which it allows you to implement and develop activities that allow you to achieve high sports results and at the same





time maintain health athletes. It is worth noting the fact that the main task of sports physiology is a comparative study of the functional state of the human body. An experimental study is usually carried out before the implementation of physical activity, during and after its implementation. Thus, specialists have developed special stress tests that help to dose physical activity and record the corresponding changes in body functions in various periods of human activity. For this, such devices as a bicycle ergometer, a treadmill (treadmill), steps of different heights, as well as all kinds of devices that allow you to mark the functions of the cardiovascular, respiratory, muscular and central nervous systems at a distance, transmitting the corresponding indicators via telemetric channels [2]. L.V. Kapilevich considers sports physiology as an applied science and considers prevention as its main purpose, due to the fact that when studying and taking into account the reserve capabilities of the human body, it substantiates ways and means of increasing efficiency, accelerating recovery processes, preventing overwork, overstrain and pathological changes in body functions, as well as the prevention of various diseases [2]. In our opinion, it is worth agreeing with the opinion of the scientist, since this science studies the physiological state of the athlete's body, which makes it possible to identify its strengths and weaknesses, due to which it is possible to properly dose physical activity. We can assume that under the influence of properly organized physical exercises, the plastic process is enhanced, which leads to accelerated formation of bone tissue in the process of human growth. This process is most evident in childhood. In addition, moderate physical activity lasting 1.5-2.0 hours can cause an increase in the level of growth hormone in the blood by 3 times. And the higher the level of self-totropin, the more intense the growth of a person [6]. Regular exercise can help increase the strength and endurance of the respiratory muscles, increase the size of the lungs and the depth of breathing, and also reduce the frequency of respiratory movements, thereby significantly improving the process of air exchange in the respiratory tract. In this case, the lungs more fully satisfy the human body's need for oxygen [5]. Physiological changes in the respiratory system also manifest themselves in the form of an increase in the oxygen utilization coefficient and an increase in the ability of the respiratory center to maintain excitation at the maximum level for a long time. The oxygen capacity of the blood and the ability of skeletal muscles to use oxygen from the blood increase, which creates conditions for a decrease in pulmonary ventilation, both at rest and during physical exertion [7].

Regular physical exercises contribute to an increase in the number of alveoli by 15-20%, which creates a significant anatomical and functional reserve of respiration [4]. Some authors [1, 3] note that cyclic physical exercises lead to an increase in the volume





and speed indicators of the respiratory system. So, in the studies of N.G. Varlamova [3], it was found that in people involved in cross-country skiing, the patency of the respiratory tract in its different parts is higher than in people who do not go in for sports.

The cardiovascular system plays a leading role in ensuring the body's adaptation to physical activity, thereby limiting the development of the body's adaptive response [8]. Systematic physical exercises contribute to the intensive development of the heart and improve it.

function. Many morphological changes occur in the myocardium, that is, the synthesis of contractile protein increases, the number of mitochondria increases, and the concentration of myoglobin in the capillary network increases in proportion to the increase in heart mass. All this leads to moderate hypertrophy of the myocardium and an increase in its cavity, therefore, cardiac output increases, and the pulse rate decreases. These morphological and functional rearrangements provide savings of the heart and adapt the cardiovascular system to various muscle loads [2].

Often in people who regularly engage in physical exercise, there is sinus bradycardia at rest, which is characterized by low values of heart rate. Most often, a slowdown in the heart rate occurs in people who regularly engage in cyclic exercises for the development of endurance. Decline heart rate in sports is a manifestation of the influence of the vagus nerve on the sinus node and is considered a more efficient and economical circulatory system. This is due to the fact that filling in the ventricles is created during a long diastole and the metabolic process of the myocardium after the previous contraction is completely restored. One of the main manifestations as a result of a decrease in heart rate at rest is considered to be a decrease in myocardial oxygen demand [2].

At the initial stage of training, the stroke volume of blood tends to increase its values, and as the sports experience increases, its values stabilize, which contributes to a decrease in the minute volume of blood at rest.

Sports physiology is inextricably linked with human psychology. It plays an important role in the theory of physical culture, making up the basic knowledge necessary for a coach and teacher of physical culture to achieve high sports results and maintain the health of athletes. Therefore, the coach and teacher should be well informed about the features of the physiological processes that occur in the body of an athlete during training and competitive activities in order to improve their work, the ability to argue their orders and recommendations in order to avoid overwork and overstrain of their wards. The professionalism of the teacher lies in bringing to the consciousness of the athletes the meaning and significance of the tasks performed, explaining how to





perform and why this particular exercise is offered. A joint analysis of the exercises, the search for errors in the technique of movements, the causes of their occurrence contributes to the formation of a conscious and active in athletes.

Attitude to the learning process, accustoms them to introspection, self-assessment, self-control of motor activity, develops interest and desire for self-improvement. Professional self-improvement is understood as a conscious process of improving personal professional competence and the formation of professionally important qualities that meet social requirements, as well as the necessary conditions for professional activity and a personal development program. Professional self-improvement of an athlete is carried out in two interrelated forms - self-education and self-education [10]. For a coach, one of the primary tasks is to increase motivation for sports activities - this is not a lightning-fast process, since athletes need to independently analyze their results and observe the desired professional growth. To do this, it is necessary to take into account individual characteristics and interests when choosing type of activity in physical training classes, as well as to develop in pupils a systematic need for sports outside the learning process.

Teachers must also understand the essence of the changes that occur in the athlete's body during the rehabilitation period in order to actively and competently influence them, accelerating recovery reactions [1]. In addition to the positive impact on the health of the practitioner, physical activity can have a negative impact on the functional state and cause various diseases and injuries.

This occurs as a result of a discrepancy between the performed load and the functional capabilities of the body. Excessive load can cause inhibition of plastic processes and a delay in the growth and development of the body. Intense physical activity for a long time, especially in combination with adverse environmental conditions, can cause and maintain inflammatory changes in the airways [9]. Yes, I.M. Vuljanko, D. Plavec [11] note that people exercising in an open environment, exposed to cold air, which may increase the risk of respiratory dysfunction.

REFERENCES

1. Агаджанян, Н.А. Биоритмы, среда обитания, здоровье: монография / Н.А. Агаджанян, И.В. Радыш. – М.: РУДН, 2013. – 362 с.
2. Капилевич, Л.В. Физиология спорта: учебное пособие / Л.В. Капилевич. – Томск: Изд-во Томского политехнического университета, 2011. – 142 с.
3. Любошенко, Т.М. Роль пищевых и биологически активных добавок в системе подготовки спортсменов / Т.М. Любошенко, В.А. Ляпин. – Омск: СибГУФК, 2011. – 107 с.





4. Солодков, А. С. Физиология человека: общая, спортивная, возрастная: учеб. для вузов физ. Культуры / А. С. Солодков, Е. Б. Сологуб. – 4-е изд., испр. и доп. – М.: Советский спорт, 2012. – 620 с.
5. Азизов К. Х., Абдурахмонов Р. А. ПУТИ ОБЕСПЕЧЕНИЯ БЕЗОПАСНОСТИ ДОРОЖНОГО ДВИЖЕНИЯ В КРУПНЫХ ГОРОДАХ РЕСПУБЛИКИ УЗБЕКИСТАН //The edition is included into Russian Science Citation Index. – 2015. – С. 70.
6. Abduraxmanov, R. (2022). Innovatsiya va ta'lim tizimining uzviyligi. Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollar, 1(1), 51-53.
7. Abdurakhmanov R. DETERMINATION OF TRAFFIC CONGESTION AND DELAY OF TRAFFIC FLOW AT CONTROLLED INTERSECTIONS //The American Journal of Engineering and Technology. – 2022. – Т. 4. – №. 10. – С. 4-11.
8. Азизов К. Х., Абдурахмонов Р. А. Методика оценок условий движения автобусов на улицах города Ташкента.«Организация и безопасность дорожного движения в крупных городах» //Сборник докладов девятой международной конференции Санкт-Петербург. – 2010. – С. 23-24.
9. Эралиева Г. А., Зайнитдинова Д. Ш. К. Международная аккредитация медицинских учреждений //International scientific review. – 2020. – №. LXVII. – С. 102-104.
10. Шукурова С. С., Сейдалиева Л. Д., Шарипова С. Н. Анализ гемодинамики игроков во время тренировочного процесса //Academic research in educational sciences. – 2021. – Т. 2. – №. Special Issue 1. – С. 335-342.
11. Сейдалиева Л. Ж., Мусаева У. А., Серебряков В. В. Физическая работоспособность квалифицированных футболистов на различных этапах годового цикла //Интернаука. – 2020. – №. 9. – С. 6-7.
12. Сейдалиева Л. К., Волкова И. В., Егорова В. И. Анализ и оценка состояния некоторых промысловых рыб в мелководной зоне Северного Каспия //Современные проблемы науки и образования. – 2017. – №. 1. – С. 132-132.
13. Сейдалиева Л. К. и др. СОЛЕННОСТЬ И ХАРАКТЕР ГРУНТА КАК ФАКТОРЫ, ОПРЕДЕЛЯЮЩИЕ СОСТОЯНИЕ БЕНТОСА СЕВЕРНОГО КАСПИЯ //Современные проблемы науки и образования. – 2016. – №. 5. – С. 300-300.
14. Сейдалиева Л. Д., Хайруллаева Н. Д. БАДИЙ ГИМНАСТИКА БИЛАН ШУҒУЛЛАНУВЧИ СПОРТЧИЛАР ОРГАНИЗМИДА МАШҒУЛОТ ЖАРАЁНИДА КАРДИО РЕСПИРАТОР ТИЗИМИДАГИ ЎЗГАРИШЛАР



- //Oriental renaissance: Innovative, educational, natural and social sciences. – 2022. – Т. 2. – №. 3. – С. 1248-1256.
15. Abduraxmanov R., Azizov Q. Maxsus fanlarni o‘qitishning asosiy tamoyillari //Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollar. – 2022. – Т. 1. – №. 1. – С. 49-51.
16. Abduraxmanov R. Innovatsiya va ta‘lim tizimining uzviyligi //Zamonaviy innovatsion tadqiqotlarning dolzarb muammolari va rivojlanish tendensiyalari: yechimlar va istiqbollar. – 2022. – Т. 1. – №. 1. – С. 51-53.
17. Бурлаков И. А. и др. Изменения печени густеры *Blicca bjoerkna* (L., 1758) дельты Волги как морфофизиологический индикатор изменения условий обитания. – 2021.
18. Сейдалиева Л. К., Сокольский А. Ф., Волкова И. В. КОРМОВАЯ БАЗА БЕНТОСОЯДНЫХ РЫБ В ДЕЛЬТЕ Р. УРАЛ И СЕВЕРНОМ КАСПИИ //Каспий: прошлое, будущее, настоящее. – 2021. – С. 67-70.
19. Сейдалиева Л. Д., Серебряков В. В., Мусаева У. А. Forming a healthy lifestyle in physical culture lessons //Молодой ученый. – 2019. – №. 7. – С. 161-163.
20. Зиямухамедова С. А., Сейдалиева Л. Т. ВОЗРАСТНЫЕ ОСОБЕННОСТИ АДАПТАЦИИ КАРДИОРЕСПИРАТОРНОЙ СИСТЕМЫ ФУТБОЛИСТОВ //Интернаука. – 2020. – №. 8-1. – С. 27-28.
21. Бердиева Д. Т. и др. СПОРТДА ЧИДАМЛИЛИК, КУЧ ВА ТЕЗЛИКНИ АНИҚЛАШДА ИШЛАТИЛАДИГАН МАРКЕР ГЕНЛАРНИ ЎРГАНИШ //Fan-Sportga. – 2020. – №. 2. – С. 70-73.
22. Сейдалиева Л. Д., Юсупов Г. А. О ВОВЛЕЧЕННОСТИ СТУДЕНЧЕСКОЙ МОЛОДЕЖИ УЗБЕКИСТАНА К ЗАНЯТИЯМ ПО ФИЗИЧЕСКОЙ КУЛЬТУРЕ И СПОРТОМ С ОЦЕНКОЙ СОСТОЯНИЯ ИХ ЗДОРОВЬЯ //Актуальные вопросы науки и практики. – 2020. – С. 296-302.
23. Шукурова С. С., Алламуратов М. МАКТАБ ЁШИДАГИ СКОЛИОЗИ МАВЖУД БЎЛГАН БОЛАЛАРНИ ТАЯНЧ-ҲАРАКАТ АППАРАТНИНГ ФУНКЦИОНАЛ ҲОЛАТИНИ ТИКЛАШ МД Пулатова.
24. Шукурова С. С., Пулатова М. Д., Рахимова М. Ш. АЁЛЛАР САЛОМАТЛИГИНИ СОҒЛОМЛАШТИРУВЧИ ГИМНАСТИКА ЁРДАМИДА ТИКЛАШ //Academic research in educational sciences. – 2021. – Т. 2. – №. 1. – С. 362-369.
25. Шукурова С. С., Хасанова Н. Р. БОКСЧИЛАРНИ ЖИСМОНИЙ ТАЙЁРГАРЛИК ВА МУСОБОҚА ЖАРАЁНЛАРИДАГИ ЭНЕРГИЯ САРФИ ВА ТЎҒРИ ОВҚАТЛАНИШНИНГ ЎЗИГА ХОС ХУСУСИЯТЛАРИ //Academic research in educational sciences. – 2021. – Т. 2. – №. 1. – С. 1109-1115.



26. Pulatova M. D., Allamuratov M., Shukurova S. S. The Influence of Training Loads on the Functional State of the Cardiorespiratory System in Girls Doing Judo //Annals of the Romanian Society for Cell Biology. – 2021. – Т. 25. – №. 6. – С. 2769-2774.
27. Шукурова С. С., Алимова Д. А. Влияние экологических факторов на работоспособность спортсменов //Молодой ученый. – 2019. – №. 5. – С. 301-303.
28. Шукурова С. С., Алимова Д. А. НЕКОТОРЫЕ БИОХИМИЧЕСКИЕ ИССЛЕДОВАНИЯ КРОВИ У ГРЕБЦОВ В ПОДГОТОВИТЕЛЬНОМ И СОРЕВНОВАТЕЛЬНОМ ПЕРИОДАХ //Актуальные проблемы физической культуры и спорта. – 2019. – С. 294-298.
29. Шукурова С. С. и др. БОКСЧИЛАР ШКАСТЛАНИШНИ БИОМЕХАНИК ВА МАТЕМАТИК МОДЕЛЛАШ АСОСИДА ТАХЛИЛИ //Academic research in educational sciences. – 2021. – Т. 2. – №. 4. – С. 1795-1801.
30. Пулатова М. Д., Шукурова С. С., Алламуратов М. МАКТАБ ЁШИДАГИ СКОЛИОЗИ МАВЖУД БЎЛГАН БОЛАЛАРНИ ТАЯНЧ-ЎАРАКАТ АППАРАТНИНГ ФУНКЦИОНАЛ ҲОЛАТИНИ ТИКЛАШ //Academic research in educational sciences. – 2021. – Т. 2. – №. 4. – С. 1834-1842.
31. Шукурова С. С. и др. ЁШ СПОРТЧИЛАРНИ ЖИСМОНИЙ ЮКЛАМАЛАРДАН КЕЙИНГИ БИОКИМЁВИЙ МОНИТОРИНГИ //Academic research in educational sciences. – 2021. – Т. 2. – №. 1. – С. 1116-1122.
32. Эркинов Ш. Ш. У. и др. Анализ взаимосвязи параметров состава тела с параметрами скоростных качеств у футболистов на этапе углубленной специализации //Человек. Спорт. Медицина. – 2021. – Т. 21. – №. S1. – С. 38-44.
33. Турсунова З. М. и др. Получение экстракционной фосфорной кислоты из химически обогащенного концентрата фосфоритов центральных Кызылкумов //Химическая промышленность сегодня. – 2003. – №. 8. – С. 36-38.
34. Шукурова С. С., Маматова З. А., Юсупова У. Р. Исследование количественного содержания аминокислотного спектра мембран эритроцитов и роль генетических и средовых факторов в ее формировании //Интернаука. – 2020. – №. 19-1. – С. 21-22.
35. Шукурова С. С., Алимова Д. А. Развитие тренировочных нагрузок высококвалифицированных боксеров в горных регионах //Молодой ученый. – 2020. – №. 4. – С. 454-456.





36. Адилбеков Т. Т. и др. Влияние физической нагрузки на систему" двигательное окончание-мышечное волокно" //Молодой ученый. – 2020. – №. 9. – С. 75-77.
37. Sobirovna K. D. et al. DEVELOPMENT OF SMALL BUSINESS AND ENTREPRENEURSHIP-A SPRINGBOARD FOR ENSURING MACROECONOMIC STABILITY //Journal of Contemporary Issues in Business and Government Vol. – 2021. – Т. 27. – №. 2.
38. Джураев Р. У. и др. АНАЛИЗ РАБОТЫ И ПОВЫШЕНИЕ ЭФФЕКТИВНОСТИ КОМПРЕССОРНЫХ УСТАНОВОК НА ГЕОЛОГОРАЗВЕДОЧНЫХ РАБОТАХ //INTERNATIONAL SCIENTIFIC REVIEW OF THE PROBLEMS AND PROSPECTS OF MODERN SCIENCE AND EDUCATION. – 2018. – С. 29-31.
39. Шукурова С. С., Сейдалиева Л. Д., Шарипова С. Н. Анализ гемодинамики игроков во время тренировочного процесса //Academic research in educational sciences. – 2021. – Т. 2. – №. Special Issue 1. – С. 335-342.
40. Шукурова С. С., Пулатова М. Д., Серебряков В. В. Изменения показателей макроэлементов в крови у футболистов после физической нагрузки //Academic research in educational sciences. – 2021. – Т. 2. – №. Special Issue 1. – С. 278-286.
41. Адилбеков Т. Т. и др. Влияние физической нагрузки на систему" двигательное окончание-мышечное волокно" //Молодой ученый. – 2020. – №. 9. – С. 75-77.
42. Шукурова С. С., Чутбоев Э. Т. СОВЕРШЕНСТВОВАНИЕ ТЕХНИКИ ПОВОРОТА ПРИ ПЛАВАНИИ СПОСОБОМ БРАСС С ИСПОЛЬЗОВАНИЕМ ОРИЕНТИРОВОЧНОЙ ОСНОВЫ ДЕЙСТВИЙ И ЦЕЛОСТНО-ОПЕРАЦИОННОГО МЕТОДА ОБУЧЕНИЯ //Актуальные проблемы физической культуры и спорта. – 2019. – С. 248-251.
43. Ольховская И. В., Шукурова С. С., Очиллов К. Т. Криптовалюта-новый шаг в мировой экономике //Проблемы современной науки и образования. – 2020. – №. 2 (147). – С. 17-19.
44. ПУЛАТОВ С. Н. 14-16 ёшли футболчилар хужумларини ташкил қилишларида ҳажм ва сифат кўрсаткичларини таҳлили //Фан-Спортга. – 2020. – №. 3. – С. 26-28.
45. Пулатов С. Н. ФУТБОЛЧИ АЁЛЛАРНИ МУСОБАҚА ФАОЛИЯТИНИ ТАҲЛИЛ ҚИЛИШ //Academic research in educational sciences. – 2021. – Т. 2. – №. Special Issue 1. – С. 179-184.
46. Axmadovna M. S. FEATURES OF THE MORPHOPHENOTYPE AND CHARACTERISTICS OF THE PHYSICAL PERFORMANCE OF YOUNG





- FOOTBALL PLAYERS AND THEIR RELATIONSHIP WITH THE PLAYING ROLE //EUROPEAN JOURNAL OF MODERN MEDICINE AND PRACTICE. – 2022. – Т. 2. – №. 3. – С. 1-5.
47. Пулатов С. Н. АНАЛИЗ СОСТАВА ТЕЛА У ФУТБОЛИСТОВ 18-19 ЛЕТ, КАК ФАКТОРА, ВЛИЯЮЩЕГО НА УРОВЕНЬ ИХ СПЕЦИАЛЬНОЙ ВЫНОСЛИВОСТИ НА РАЗЛИЧНЫХ ЭТАПАХ ГОДИЧНОГО ЦИКЛА //Fan-Sportga. – 2021. – №. 8. – С. 55-56.
48. Po'latov S. N. USING MODERN CORPORATE GOVERNANCE SYSTEM IN UZBEKISTAN SPORT //Инновационное развитие. – 2017. – №. 4. – С. 76-77.
49. Po'latov S. N. 18-19 YOSHLI FUTBOLCHILARNI TAYYORLASHDA MAXSUS SHIDAMLILIKNI OSHIRISHGA QARATILGAN YUKLAMALAR TAHLILI //Academic research in modern science. – 2022. – Т. 1. – №. 9. – С. 201-203.
50. Dzhalalovna P. M., Sadullaevna S. S. FUNCTIONAL STATE OF CARDIAC CYCLE PARAMETERS IN KARATE AFTER MUSCLE OVERSTRAIN //Spectrum Journal of Innovation, Reforms and Development. – 2022. – Т. 5. – С. 1-5.
51. Пулатов М. Д., Косимов А. А., Тожибоев М. М. НОВОЕ СЕМЕЙСТВО ФЛАВОНОИДОВ" FАВАСАЕ" //VOLGAMEDSCIENCE. – 2019. – С. 369-370.
52. Нишонов Ф. Н. и др. Качество жизни до и после операции у больных с диффузным токсическим зобом //Молодой ученый. – 2019. – №. 48. – С. 106-111.
53. Худоярова А. Г. и др. СОЗДАНИЕ МЕДИЦИНСКОГО ТЕЛЕКАНАЛА MEDLIFE Андижанский государственный медицинский институт, г //Андижан. Башкирского государственного медицинского университета. – Т. 64.
54. Байбекова Г. Д., Пулатов М. Д. ВЛИЯНИЕ ИНТРАДУОДЕНАЛЬНО ВВЕДЕННОЙ АМИЛАЗЫ НА ФЕРМЕНТОВЫДЕЛИТЕЛЬНУЮ ДЕЯТЕЛЬНОСТЬ ПОДЖЕЛУДОЧНОЙ ЖЕЛЕЗЫ //НЕДЕЛЯ НАУКИ-2018. – 2018. – С. 424-425.
55. Пулатов М. Д., Байбекова Г. Д., Джураев Д. Д. СОЗДАНИЕ ПРОЕКТА ИНСТИТУТ ТВ //Инновации в медицине. Материалы I международной научно-практической конференции-Махачкала, 2019.-Том. I.-323 с. – 2019. – С. 136.
56. Абдурахимов А. Х., Пулатов М. Д. ОЦЕНКА АЛЛЕРГИИ ПРЕПАРАТОМ" СИНГЛОН И L-ЦЕТ" У БОЛЬНЫХ КРАПИВНИЦЕЙ //Актуальные вопросы медицинской науки. – 2019. – С. 312-312.



57. Akhmedova M. et al. Primary classes based on media technologies represent an international rating system for teacher control //International Journal of Psychosocial Rehabilitation. – 2020. – Т. 24. – №. 4. – С. 3872-3885.
58. Исламова Г. Т. ИНТЕГРИРОВАННЫЙ ПОДХОД К ОБУЧЕНИЮ ПРЕДМЕТАМ В НАЧАЛЬНОЙ ШКОЛЕ //НАУКА, ОБЩЕСТВО, ОБРАЗОВАНИЕ В ЭПОХУ ЦИФРОВИЗАЦИИ И ГЛОБАЛЬНЫХ ИЗМЕНЕНИЙ. – 2022. – С. 183-185.
59. Islamova G. T. METHODS FOR FORMING MORAL QUALITIES IN YOUNGER SCHOOL CHILDREN (research materials) //Экономика и социум. – 2021. – №. 8. – С. 264-274.
60. Исламова Г. Т., Голубева Л. А. Духовно-нравственное воспитание учащихся как компонент здоровья сберегающей деятельности преподавателей профессиональных колледжей и лицеев //Научный электронный журнал "Профессиональное образование Арктических регионов". – 2020. – №. 4. – С. 37-39.
61. Исламова Г. Т. СОЦИАЛЬНО-ПЕДАГОГИЧЕСКАЯ СИСТЕМА ФОРМИРОВАНИЯ ДУХОВНО-НРАВСТВЕННЫХ КАЧЕСТВ У МЛАДШИХ ШКОЛЬНИКОВ (МАТЕРИАЛЫ ИССЛЕДОВАНИЯ) //Вестник современной науки. – 2016. – №. 1-2. – С. 89-92.
62. Khamdamovna I. Z., Kamola R., Nigora J. Problems and Solutions for the Organization of Pedagogical Communication in the Educational Process of Future Primary School Teachers //European Multidisciplinary Journal of Modern Science. – 2022. – Т. 4. – С. 413-416.

