

МИНОБРНАУКИ РОССИИ

**Федеральное государственное автономное образовательное
учреждение высшего образования "Пермский
государственный национальный исследовательский
университет"**

Кафедра зоологии позвоночных и экологии

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Рабочая программа дисциплины

DEVELOPMENTAL ANATOMY, PHYSIOLOGY AND HYGIENE

Код УМК 99418

Утверждено
Протокол №5
от «13» мая 2022 г.

Пермь, 2022

1. Наименование дисциплины

Developmental Anatomy, Physiology and Hygiene

2. Место дисциплины в структуре образовательной программы

Дисциплина входит в обязательную часть Блока « Б.1 » образовательной программы по направлениям подготовки (специальностям):

Направление подготовки: **44.03.01** Педагогическое образование
направленность Management in Education

3. Планируемые результаты обучения по дисциплине

В результате освоения дисциплины **Developmental Anatomy, Physiology and Hygiene** у обучающегося должны быть сформированы следующие компетенции:

44.03.01 Педагогическое образование (направленность : Management in Education)

ОПК.1 обладает знанием в избранной и смежной предметной области в объеме достаточном для осуществления профессиональной деятельности

Индикаторы

ОПК.1.1 осуществляет профессиональную деятельность на основе достаточного объема знаний в смежной предметной области

ОПК.1.2 осуществляет профессиональную деятельность на основе достаточного объема знаний в избранной предметной области

ОПК.7 способен использовать психолого-педагогические технологии в профессиональной деятельности, необходимые для индивидуализации обучения, развития, воспитания, в том числе обучающихся с особыми образовательными потребностями

Индикаторы

ОПК.7.1 использует психолого-педагогические технологии в профессиональной деятельности для индивидуализации обучения, развития и воспитания

ОПК.7.2 учитывает особые образовательные потребности обучающихся применяя психолого-педагогические технологии

4. Объем и содержание дисциплины

Направления подготовки	44.03.01 Педагогическое образование (направленность: Management in Education)
форма обучения	очная
№№ триместров, выделенных для изучения дисциплины	4
Объем дисциплины (з.е.)	3
Объем дисциплины (ак.час.)	108
Контактная работа с преподавателем (ак.час.), в том числе:	42
Проведение лекционных занятий	14
Проведение практических занятий, семинаров	28
Самостоятельная работа (ак.час.)	66
Формы текущего контроля	Входное тестирование (1) Итоговое контрольное мероприятие (1) Письменное контрольное мероприятие (2)
Формы промежуточной аттестации	Зачет (4 триместр)

5. Аннотированное описание содержания разделов и тем дисциплины

General questions of age anatomy, physiology and hygiene

Subject and methods of age anatomy, physiology and hygiene. The main patterns of growth and development of the child's body at various stages of ontogenesis, the basic periods of human development. Taking into account age-related anatomical and physiological characteristics of children and adolescents in training and education (including children with special educational needs). The role of heredity and environment in the formation of the organism, their significance as risk factors for violations of the physical and neuropsychic development and health of a child. Biological age criteria. Sanitary and epidemiological, hygienic norms and rules in the organization of the educational process, increment in the efficiency of students in various types of educational and labor activities. Complex diagnostics of the functional development level of a child.

Regulatory systems of the body

The concept of neurohumoral regulation of body functions. Anatomy and physiology of the nervous system. The significance of the nervous system. Reflex arc, its components. Reflex ring. Nerve centers and their properties. Inhibition in the CNS. Central and peripheral nervous systems. Autonomic nervous system. The role of regulatory systems in the formation of the child's organism. Anatomical and physiological foundations of higher nervous activity in children. Basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren. Anatomy and physiology of the endocrine system. The modern concept of health, its role as an adequate criterion for the environmental wellness. Indicators and criteria of health, their role in maintaining children's health. Comprehensive diagnostics of the level of the child's functional development and learning readiness (school maturity), (including children with special educational needs)

Motor functions

Human skeleton. Functions of the skeletal system. Divisions of the skeletal system: skull, spine, chest, upper and lower limbs, pectoral and pelvic arches. Age features of the skeleton formation, taking into account age characteristics when working with children. Muscular system. Muscle functions. Muscle classification. Muscle fiber structure. Mechanism of muscle contraction. Age-related features of the formation of the muscular system, taking into account age-related characteristics when working with children (including those with special educational needs). Prevention of disorders in the musculoskeletal system in children and adolescents. Physical development. Methods for determining the level of physical development of children and adolescents.

Visceral functions

Internal environment of the organism. Homeostasis. Blood. Immune system. Blood circulation. Breath. Metabolism and energy exchange. Digestion. Excretion. Skin. Reproductive system. Features of the functioning of the visceral system at different age stages, the necessity to take them into account in professional activities of a teacher. Methods for assessing the main external indicators of the activity of physiological systems (cardiovascular, respiratory, etc.) and their age characteristics. Injury prevention measures and first aid. Types of emergency conditions, their causes, the essential rules of first aid in case of emergency conditions. Cardiopulmonary resuscitation.

Sensory functions

General questions of anatomy and physiology of sensory systems. Visual sensory system. Auditory sensory system. Age-related axioms in the formation of sensory systems in children and adolescents. Prevention of hearing and vision impairments. Hygiene of vision and hearing. Health-saving technologies of education and upbringing. Comprehensive diagnostics of the level of visual and auditory sensory systems of students. Using the knowledge of anatomy and physiology of sensory systems for implementation an individual approach in teaching, educating and maintaining the health of students.

Psychophysiology

Psychophysiological aspects of children's behavior. The concept of higher nervous activity, anatomical and

physiological foundations of higher nervous activity in children. Characteristics of unconditioned and conditioned reflexes. Features of the functioning of the central systems at different age stages. Age features of psychophysiological functions. The role of regulatory systems in the formation of psychophysiological processes in the child's body. Hygiene of mental work. Basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren. Comprehensive diagnostics of the level of functional development and learning readiness (school maturity) of a child.

Sanitary and epidemiological, hygienic norms and rules in the organization of the educational process. The use of knowledge of psychophysiological and age characteristics for improvement of the performance of students\schoolchildren (including those with special educational needs) in various types of educational and labor activities, for selection and implementation of psychological and pedagogical technologies, for organizing the professional activities of a teacher and / or other areas of work with children.

The use of knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, and selecting an individual approach to teaching, educating and maintaining the health of students\schoolchildren (including those with special educational needs).

6. Методические указания для обучающихся по освоению дисциплины

Освоение дисциплины требует систематического изучения всех тем в той последовательности, в какой они указаны в рабочей программе.

Основными видами учебной работы являются аудиторские занятия. Их цель - расширить базовые знания обучающихся по осваиваемой дисциплине и систему теоретических ориентиров для последующего более глубокого освоения программного материала в ходе самостоятельной работы. Обучающемуся важно помнить, что контактная работа с преподавателем эффективно помогает ему овладеть программным материалом благодаря расстановке необходимых акцентов и удержанию внимания интонационными модуляциями голоса, а также подключением аудио-визуального механизма восприятия информации.

Самостоятельная работа преследует следующие цели:

- закрепление и совершенствование теоретических знаний, полученных на лекционных занятиях;
- формирование навыков подготовки текстовой составляющей информации учебного и научного назначения для размещения в различных информационных системах;
- совершенствование навыков поиска научных публикаций и образовательных ресурсов, размещенных в сети Интернет;
- самоконтроль освоения программного материала.

Обучающемуся необходимо помнить, что результаты самостоятельной работы контролируются преподавателем во время проведения мероприятий текущего контроля и учитываются при промежуточной аттестации.

Обучающимся с ОВЗ и инвалидов предоставляется возможность выбора форм проведения мероприятий текущего контроля, альтернативных формам, предусмотренным рабочей программой дисциплины. Предусматривается возможность увеличения в пределах 1 академического часа времени, отводимого на выполнение контрольных мероприятий.

Процедура оценивания результатов обучения инвалидов и лиц с ограниченными возможностями здоровья по дисциплине предусматривает предоставление информации в формах, адаптированных к ограничениям их здоровья и восприятия информации.

При проведении текущего контроля применяются оценочные средства, обеспечивающие передачу информации, от обучающегося к преподавателю, с учетом психофизиологических особенностей здоровья обучающихся.

7. Перечень учебно-методического обеспечения для самостоятельной работы обучающихся по дисциплине

При самостоятельной работе обучающимся следует использовать:

- конспекты лекций;
- литературу из перечня основной и дополнительной учебной литературы, необходимой для освоения дисциплины (модуля);
- текст лекций на электронных носителях;
- ресурсы информационно-телекоммуникационной сети "Интернет", необходимые для освоения дисциплины;
- лицензионное и свободно распространяемое программное обеспечение из перечня информационных технологий, используемых при осуществлении образовательного процесса по дисциплине;
- методические указания для обучающихся по освоению дисциплины.

8. Перечень основной и дополнительной учебной литературы

Основная:

1. Histophysiology of the nervous tissue, nerve system and organs of sight and hearing : учебное пособие / А. В. Иванов, Т. А. Ишунина, С. Н. Радионов, А. В. Прусаченко. — Саратов : Ай Пи Эр Медиа, 2018. — 84 с. — ISBN 978-5-4486-0029-6. — Текст : электронный // Электронно-библиотечная система IPR BOOKS : [сайт]. <http://www.iprbookshop.ru/73348>

Дополнительная:

1. Hole, J. W. Human Anatomy Physiology/Hole, J. W..-Dubuque:WCB,1993, ISBN 0-697-12271-9.-980.

9. Перечень ресурсов сети Интернет, необходимых для освоения дисциплины

При освоении дисциплины использование ресурсов сети Интернет не предусмотрено.

10. Перечень информационных технологий, используемых при осуществлении образовательного процесса по дисциплине

Образовательный процесс по дисциплине **Developmental Anatomy, Physiology and Hygiene** предполагает использование следующего программного обеспечения и информационных справочных систем:

- 1) presentation materials (slides on the topics of lectures);
- 2) online access to the Electronic Library System (ELS);
- 3) access to the electronic information and educational environment of the university;
- 4) Internet services and electronic resources.

При освоении материала и выполнении заданий по дисциплине рекомендуется использование материалов, размещенных в Личных кабинетах обучающихся ЕТИС ПГНИУ (**student.psu.ru**).

При организации дистанционной работы и проведении занятий в режиме онлайн могут использоваться:

система видеоконференцсвязи на основе платформы BigBlueButton (<https://bigbluebutton.org/>).

система LMS Moodle (<http://e-learn.psu.ru/>), которая поддерживает возможность использования текстовых материалов и презентаций, аудио- и видеоконтент, а так же тесты, проверяемые задания, задания для совместной работы.

система тестирования Indigo (<https://indigotech.ru/>).

11. Описание материально-технической базы, необходимой для осуществления образовательного процесса по дисциплине

Equipment and facilities required for lectures:

a classroom equipped with specialized furniture, demonstration equipment (projector, screen, computer / laptop) with appropriate software, chalk board and/or white board.

Equipment and facilities required for practical work:

a classroom equipped with specialized furniture, demonstration equipment (projector, screen, computer / laptop) with appropriate software, chalk board and/or white board, visual aids.

Equipment and facilities required for independent work:

the Scientific Library of Perm State University which provides access to local and global networks.

Equipment and facilities required for ongoing control and intermediate assessment activities, group and individual consultations:

a classroom equipped with specialized furniture, demonstration equipment (projector, screen, computer / laptop) with appropriate software, chalk board and/or white board.

Помещения научной библиотеки ПГНИУ для обеспечения самостоятельной работы обучающихся:

1. Научно-библиографический отдел, корп.1, ауд. 142. Оборудован 3 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

2. Читальный зал гуманитарной литературы, корп. 2, ауд. 418. Оборудован 7 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

3. Читальный зал естественной литературы, корп.6, ауд. 107а. Оборудован 5 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

4. Отдел иностранной литературы, корп.2 ауд. 207. Оборудован 1 персональным компьютером с доступом к локальной и глобальной компьютерным сетям.

5. Библиотека юридического факультета, корп.9, ауд. 4. Оборудована 11 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

6. Читальный зал географического факультета, корп.8, ауд. 419. Оборудован 6 персональными компьютерами с доступом к локальной и глобальной компьютерным сетям.

Все компьютеры, установленные в помещениях научной библиотеки, оснащены следующим программным обеспечением:

Операционная система ALT Linux;

Офисный пакет Libreoffice.

Справочно-правовая система «КонсультантПлюс»

**Фонды оценочных средств для аттестации по дисциплине
Developmental Anatomy, Physiology and Hygiene**

**Планируемые результаты обучения по дисциплине для формирования компетенции.
Индикаторы и критерии их оценивания**

ОПК.7

способен использовать психолого-педагогические технологии в профессиональной деятельности, необходимые для индивидуализации обучения, развития, воспитания, в том числе обучающихся с особыми образовательными потребностями

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
<p>ОПК.7.1 использует психолого-педагогические технологии в профессиональной деятельности для индивидуализации обучения, развития и воспитания</p>	<p>Knows</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - anatomical and physiological foundations of higher nervous activity in children; - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren; <p>Is able to</p> <ul style="list-style-type: none"> – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities; - use knowledge of anatomy, physiology and health-saving technologies for the rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; –implement the preventive principles of a “healthy lifestyle” in work with children. <p>Possesses</p> <ul style="list-style-type: none"> - methods and skills of complex diagnostics for the level of functional development of a child and his or her readiness for 	<p align="center">Неудовлетворител</p> <p>Unsatisfactory (poor) Does not know</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - anatomical and physiological foundations of higher nervous activity in children; - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren; <p>Is not able</p> <ul style="list-style-type: none"> – to use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities; - to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; – to implement the preventive principles of a “healthy lifestyle” in work with children. <p>Does not possess</p> <ul style="list-style-type: none"> - methods and skills of complex diagnostics for the level of functional development of a child and his or her readiness for learning; - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics; - methods for complex diagnostics of the level

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	<p>learning;</p> <ul style="list-style-type: none"> - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics; - methods for complex diagnostics of the level of the child's functional development and learning readiness (school maturity); - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities (uses psychological and pedagogical technologies in professional activities for the individualization of training, development and education. 	<p style="text-align: center;">Неудовлетворител</p> <p>of the child's functional development and learning readiness (school maturity);</p> <ul style="list-style-type: none"> - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities. <p style="text-align: center;">Удовлетворительн</p> <p>Satisfactory</p> <p>Partially knows</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - anatomical and physiological foundations of higher nervous activity in children; - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren. <p>Is poorly able</p> <ul style="list-style-type: none"> – to use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities; - to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; – to implement the preventive principles of a “healthy lifestyle” in work with children. <p>Does not possess</p> <ul style="list-style-type: none"> - methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness; - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.)

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		<p style="text-align: center;">Удовлетворительн</p> <p>and their age characteristics; - methods for complex diagnostics of the level of the child’s functional development and learning readiness (school maturity); - - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities.</p> <p style="text-align: center;">Хорошо</p> <p>Knows - the role of regulatory systems in the formation of the child's body; - anatomical and physiological foundations of higher nervous activity in children; - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren.</p> <p>Is able – to use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities; - to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; – to implement the preventive principles of a “healthy lifestyle” in work with children.</p> <p>Partially possesses - methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness (school maturity); - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics;</p>

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		<p style="text-align: center;">Хорошо</p> <ul style="list-style-type: none"> - methods for complex diagnostics of the level of the child’s functional development and learning readiness (school maturity); - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities. <p style="text-align: center;">Отлично</p> <p>Knows</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - anatomical and physiological foundations of higher nervous activity in children; - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren. <p>Is able to</p> <ul style="list-style-type: none"> – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities; - use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; – implement the preventive principles of a “healthy lifestyle” in work with children. <p>Possesses</p> <ul style="list-style-type: none"> - methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness (school maturity); - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics; - methods for complex diagnostics of the level

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Отлично</p> <p>of the child's functional development and learning readiness (school maturity); - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities.</p>
<p>ОПК.7.2 учитывает особые образовательные потребности обучающихся применяя психолого-педагогические технологии</p>	<p>Knows</p> <ul style="list-style-type: none"> – the role of regulatory systems in the formation of the child's body; – features of the functioning of the central, sensory, motor and visceral systems at different age stages; – anatomical and physiological foundations of higher nervous activity in children; – basic hygienic requirements aimed at maintaining and strengthening schoolchildren's health. <p>Is able to:</p> <ul style="list-style-type: none"> – use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners. <p>Possesses:</p> <ul style="list-style-type: none"> – methods and skills of complex diagnostics for assessing the functional development of children and adolescents. 	<p style="text-align: center;">Неудовлетворител</p> <p>Does not know</p> <ul style="list-style-type: none"> – the role of regulatory systems in the formation of the child's body; – features of the functioning of the central, sensory, motor and visceral systems at different age stages; – anatomical and physiological foundations of higher nervous activity in children; – basic hygienic requirements aimed at maintaining and strengthening schoolchildren's health. <p>Is not able:</p> <ul style="list-style-type: none"> – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners. <p>Does not possess:</p> <ul style="list-style-type: none"> – methods and skills of complex diagnostics for assessing the functional development of children and adolescents. <p style="text-align: center;">Удовлетворительн</p> <p>Knows</p> <ul style="list-style-type: none"> – the role of regulatory systems in the formation of the child's body; – features of the functioning of the central, sensory, motor and visceral systems at different age stages; – anatomical and physiological foundations of

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Удовлетворительн</p> <p>higher nervous activity in children; – basic hygienic requirements aimed at maintaining and strengthening schoolchildren's health.</p> <p>Is poorly able to: – use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners.</p> <p>Does not possess: methods and skills of complex diagnostics for assessing the functional development of children and adolescents.</p> <p style="text-align: center;">Хорошо</p> <p>Knows – the role of regulatory systems in the formation of the child's body; – features of the functioning of the central, sensory, motor and visceral systems at different age stages; – anatomical and physiological foundations of higher nervous activity in children; – basic hygienic requirements aimed at maintaining and strengthening schoolchildren's health.</p> <p>Is generally able to: – use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners.</p> <p>Partly possesses:</p>

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Хорошо</p> <p>– methods and skills of complex diagnostics for assessing the functional development of children and adolescents.</p> <p style="text-align: center;">Отлично</p> <p>Knows</p> <p>– the role of regulatory systems in the formation of the child's body;</p> <p>– features of the functioning of the central, sensory, motor and visceral systems at different age stages;</p> <p>– anatomical and physiological foundations of higher nervous activity in children;</p> <p>– basic hygienic requirements aimed at maintaining and strengthening schoolchildren's health.</p> <p>Is able:</p> <p>– to use the acquired theoretical and practical skills for organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>– to use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners.</p> <p>Possesses:</p> <p>methods and skills of complex diagnostics for assessing the functional development of children and adolescents.</p>

ОПК.1

обладает знанием в избранной и смежной предметной области в объеме достаточном для осуществления профессиональной деятельности

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
ОПК.1.2 осуществляет профессиональную деятельность на основе достаточного объема	Knows – features of functioning of visceral systems at different age stages;	<p style="text-align: center;">Неудовлетворител</p> Does not know – features of functioning of visceral systems at different age stages;

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
<p>знаний в избранной предметной области</p>	<p>Is able – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Possesses: - methods for assessing main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics.</p>	<p>Неудовлетворител</p> <p>Is not able – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Does not possess: - methods for assessing main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics.</p> <p>Удовлетворительн</p> <p>Knows in general – features of functioning of visceral systems at different age stages;</p> <p>Is poorly able – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Does not possess: - methods for assessing main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics.</p> <p>Хорошо</p> <p>Knows – features of functioning of visceral systems at different age stages;</p> <p>Is able in general – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Possesses in general: - methods for assessing main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics.</p>

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Отлично</p> <p>Knows – features of functioning of visceral systems at different age stages;</p> <p>Is able – to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Possesses: - methods for assessing main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics.</p>
<p>ОПК.1.1 осуществляет профессиональную деятельность на основе достаточного объема знаний в смежной предметной области</p>	<p>Knows - the role of regulatory systems in the formation of the child's body; - features of the functioning of the central, sensory, motor and visceral systems at different age stages; - anatomical and physiological foundations of higher nervous activity in children;</p> <p>Is able to – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Possesses: - the skills of applying the rules in organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities (carries out professional activities on the basis of a sufficient amount of knowledge in the related subject area)</p>	<p style="text-align: center;">Неудовлетворител</p> <p>Does not know - the role of regulatory systems in the formation of the child's body; - features of the functioning of the central, sensory, motor and visceral systems at different age stages; - anatomical and physiological foundations of higher nervous activity in children;</p> <p>Is not able to – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Does not possess - the skills of applying the rules in organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities</p> <p style="text-align: center;">Удовлетворительн</p> <p>Knows - the role of regulatory systems in the formation of the child's body; - features of the functioning of the central, sensory, motor and visceral systems at different age stages;</p>

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Удовлетворительн</p> <p>- anatomical and physiological foundations of higher nervous activity in children;</p> <p>Is poorly able to – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Does not possess - the skills of applying the rules in organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities.</p> <p style="text-align: center;">Хорошо</p> <p>Knows - the role of regulatory systems in the formation of the child's body; - features of the functioning of the central, sensory, motor and visceral systems at different age stages; - anatomical and physiological foundations of higher nervous activity in children;</p> <p>Is able to – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Partly possesses - the skills of applying the rules in organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities.</p> <p style="text-align: center;">Отлично</p> <p>Knows - the role of regulatory systems in the formation of the child's body; - features of the functioning of the central, sensory, motor and visceral systems at different age stages;</p>

Компетенция (индикатор)	Планируемые результаты обучения	Критерии оценивания результатов обучения
		<p style="text-align: center;">Отлично</p> <p>- anatomical and physiological foundations of higher nervous activity in children;</p> <p>Is able to – use the acquired theoretical and practical skills for the organization of scientific, methodological, socio-pedagogical and teaching activities;</p> <p>Possesses: - the skills of applying the rules in organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities</p>

Оценочные средства текущего контроля и промежуточной аттестации

Схема доставки : Базовая

Вид мероприятия промежуточной аттестации : Зачет

Способ проведения мероприятия промежуточной аттестации : Оценка по дисциплине в рамках промежуточной аттестации определяется на основе баллов, набранных обучающимся на контрольных мероприятиях, проводимых в течение учебного периода.

Максимальное количество баллов : 100

Конвертация баллов в отметки

«отлично» - от 81 до 100

«хорошо» - от 61 до 80

«удовлетворительно» - от 47 до 60

«неудовлетворительно» / «незачтено» менее 47 балла

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
Входной контроль	General questions of age anatomy, physiology and hygiene Входное тестирование	Knows - basic concepts of anatomy, physiology and hygiene; - modern concept of "health", its role in human life. Is able to - use the knowledge of anatomy, physiology and hygiene for rational organization of the process of educational activities. Possesses - basic concepts of anatomy, physiology and hygiene

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
<p>ОПК.1.1 осуществляет профессиональную деятельность на основе достаточного объема знаний в смежной предметной области</p> <p>ОПК.1.2 осуществляет профессиональную деятельность на основе достаточного объема знаний в избранной предметной области</p> <p>ОПК.7.2 учитывает особые образовательные потребности обучающихся применяя психолого-педагогические технологии</p> <p>ОПК.7.1 использует психолого-педагогические технологии в профессиональной деятельности для индивидуализации обучения, развития и воспитания</p>	<p>Visceral functions</p> <p>Письменное контрольное мероприятие</p>	

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
		<p>Knows</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - features of functioning of central, sensory, motor and visceral systems at different age stages; - anatomical and physiological foundations of higher nervous activity in children; - measures of injury prevention and first aid; - types of emergency conditions, their causes, the essential rules of first aid in case of emergency conditions. - a set of techniques for cardiopulmonary resuscitation and indications for it; - general hygiene requirements aimed at preserving and strengthening the health of schoolchildren. <p>Is able to</p> <ul style="list-style-type: none"> – use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – use the knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach to teaching, educating and maintaining the health of learners; – render first aid for various types of injuries, emergency conditions in emergency situations; – work with dummies and tables; – work with special literature, compile summaries, abstract for articles; – implement preventive principles of "healthy lifestyle" when working with children <p>Possesses</p> <ul style="list-style-type: none"> - methods and skills of complex diagnostics for assessing the functional development of children and their learning readiness; - methods of anthropometric

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
		<p>research to assess physical development and body type; - methods for assessing the main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics; - methods for complex diagnostics of the level of the child's functional development and learning readiness (school maturity); - methods for accessing physical development during studies; - methods for accessing physiological health tests; - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities.</p>

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
<p>ОПК.1.1 осуществляет профессиональную деятельность на основе достаточного объема знаний в смежной предметной области</p> <p>ОПК.1.2 осуществляет профессиональную деятельность на основе достаточного объема знаний в избранной предметной области</p> <p>ОПК.7.2 учитывает особые образовательные потребности обучающихся применяя психолого-педагогические технологии</p> <p>ОПК.7.1 использует психолого-педагогические технологии в профессиональной деятельности для индивидуализации обучения, развития и воспитания</p>	<p>Sensory functions</p> <p>Письменное контрольное мероприятие</p>	

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
		<p>Knows</p> <ul style="list-style-type: none"> - the role of regulatory systems in the formation of the child's body; - features of functioning of central, sensory, motor and visceral systems at different age stages; - the modern concept of health, its role as an adequate criterion for the environmental wellness; direct and indirect indicators of health; health criteria and their role in maintaining the health of a healthy child; - modern approaches to hygienic regulation of child's environmental factors, their role in maintaining the homeostasis of the child's body. - physiological basics of organizing optimal conditions for the educational process, independent work, work and rest routine, increasing efficiency and functionality of a developing organism. - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren. <p>Is able to</p> <ul style="list-style-type: none"> - use the acquired theoretical and practical skills for organizing scientific and methodological, socio-pedagogical and teaching activities; - use the knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach to teaching, educating and maintaining the health of learners; - work with dummies and tables; - work with special literature, compile summaries, abstracts of articles; - to implement the preventive principles of a "healthy lifestyle" in work with children. <p>Possesses (skills and / or work experience)</p> <ul style="list-style-type: none"> - methods and skills of

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
		complex diagnostics for the level of functional development of a child and his or her learning readiness;

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
<p>ОПК.1.1 осуществляет профессиональную деятельность на основе достаточного объема знаний в смежной предметной области</p> <p>ОПК.1.2 осуществляет профессиональную деятельность на основе достаточного объема знаний в избранной предметной области</p> <p>ОПК.7.2 учитывает особые образовательные потребности обучающихся применяя психолого-педагогические технологии</p> <p>ОПК.7.1 использует психолого-педагогические технологии в профессиональной деятельности для индивидуализации обучения, развития и воспитания</p>	<p>Psychophysiology</p> <p>Итоговое контрольное мероприятие</p>	<p>The control event is conducted in the form of a test and an oral interview on questions. An examinee has to know – general patterns and mechanisms of growth and development of the child's body at various stages of ontogenesis, the main periods of human development; - a role of heredity and environment in the human body formation; - a role of regulatory systems in the child's body formation; - features of functioning of central, sensory, motor and visceral systems at different age stages; - anatomical and physiological basics of higher nervous activity in children and the physiological basics of mental functions: memory, perception, attention, emotions; - physiological basis for organizing optimal conditions of educational process, independent work, work and rest routine, increasing efficiency and functionality of a developing organism (including children with special educational needs). - measures of injury prevention and first aid; - types of emergency conditions, their causes, the essential rules of first aid in case of emergency conditions. - a set of techniques for cardiopulmonary resuscitation and indications for it; - general hygiene requirements aimed at preserving and strengthening the health of schoolchildren (including children with special educational needs);</p> <p>be able to</p> <p>- use the acquired theoretical and practical skills for organization of scientific and methodological, socio-pedagogical and teaching activities; – use the knowledge of anatomy, physiology and health-saving technologies for rational organization of the</p>

Компетенция (индикатор)	Мероприятие текущего контроля	Контролируемые элементы результатов обучения
		process of education and upbringing, an individual approach to teaching, educating and maintaining the health of learners; - provide first aid for various types of injuries and emergency conditions in emergency situations; - work with dummies and tables, with special literature, compile summaries and abstracts of articles; - implement preventive principles of a healthy lifestyle in working with children; possess (skills and / or experience): - methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness; - skills of assessing some indicators of higher mental functions and individual typological personality traits (memory capacity, attention, performance, HNA type and temperament and other typological properties)

Спецификация мероприятий текущего контроля

General questions of age anatomy, physiology and hygiene

Продолжительность проведения мероприятия промежуточной аттестации: **2 часа**

Условия проведения мероприятия: **в часы аудиторной работы**

Максимальный балл, выставляемый за мероприятие промежуточной аттестации: **0**

Проходной балл: **0**

Показатели оценивания	Баллы
A student is able to use knowledge of anatomy, physiology and hygiene for rational organization of the educational process	7
A student possesses the basic concepts of anatomy, physiology and hygiene	7
A student knows basic concepts of anatomy, physiology and hygiene; modern concept of health and its role in human life activity	6

Visceral functions

Продолжительность проведения мероприятия промежуточной аттестации: **2 часа**

Условия проведения мероприятия: **в часы аудиторной работы**

Максимальный балл, выставляемый за мероприятие промежуточной аттестации: **30**

Проходной балл: 15

Показатели оценивания	Баллы
<p>A student is able to - use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; - use the knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners; – render first aid for various types of injuries, emergency conditions in emergency situations; – work with dummies and tables; – work with special literature, compile summaries, abstracts for articles; – implement preventive principles of "healthy lifestyle" when working with children</p> <p>The maximum score is given if a student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of characteristics demonstrated.</p>	10
<p>A student knows - the role of regulatory systems in the child's body formation; - features of the functioning of the central, sensory, motor and visceral systems at different age stages; - the anatomical and physiological foundations of higher nervous activity in children. - measures of injury prevention and first aid; - types of emergency conditions, their causes, the essential rules of first aid in case of emergency conditions; - a set of techniques for cardiopulmonary resuscitation and indications for it; - general hygiene requirements aimed at preserving and strengthening the health of schoolchildren.</p> <p>The maximum score is given if a student demonstrated all of the above characteristics. If not, the maximum score is multiplied by the proportion of characteristics demonstrated.</p>	10
<p>A student possesses - methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness; - methods of anthropometric studies to assess physical development and body type; - methods for determining main external indicators of the activity of physiological systems (cardiovascular, respiratory, visual, etc.) and their age characteristics;</p> <p>- methods for complex diagnostics of the level of the child's functional development and learning readiness (school maturity); - methods for accessing physical development during studies; - methods for accessing physiological health tests; - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities. – skills of rendering first aid for various types of injuries and emergency conditions in emergency situations;</p> <p>The maximum score is given if a student demonstrated all of the above characteristics. If not, the maximum score is multiplied by the proportion of characteristics demonstrated.</p>	10

Sensory functions

Продолжительность проведения мероприятия промежуточной аттестации: 2 часа

Условия проведения мероприятия: **в часы аудиторной работы**

Максимальный балл, выставляемый за мероприятие промежуточной аттестации: **30**

Проходной балл: **15**

Показатели оценивания	Баллы
<p>Written answer to three questions from the list (File Sensory Functions). Completeness and correctness of the answer: a student fully presents the material, gives correct definitions of basic concepts, A student knows - the role of regulatory systems in the formation of the child's body;- features of the functioning of the central, sensory, motor and visceral systems at different age stages; – the modern concept of health, its role as an adequate criterion for the environmental wellness; direct and indirect indicators of health; health criteria and their role in maintaining the health of a healthy child; - modern approaches to hygienic regulation of child's environmental factors, their role in maintaining the homeostasis of the child's body. - physiological basics of organizing optimal conditions for the educational process, independent work, work and rest routine, increasing efficiency and functionality of a developing organism. - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren.</p> <p>The maximum score is given if the student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of performance demonstrated.</p>	10
<p>The degree of awareness, understanding of what has been learned: a student reveals an understanding of the material, can substantiate his or her judgments, apply knowledge in practice, give the necessary examples not only from the textbook, but also independently compiled; gives an analysis; shows an understanding of the material; – use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners.– work with dummies and tables; – work with special literature, compile summaries, abstract for articles; – implement preventive principles of "healthy lifestyle" when working with children</p> <p>The maximum score is given if the student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of performance demonstrated.</p> <p>is able to use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activity;</p>	10
<p>A student possesses methods and skills of complex diagnostics for the level of functional development of a child and his or her learning readiness;</p> <p>- presents the material consistently and correctly in accordance with norms of the literary language; - gives clear and competent answers. The maximum score is given if the student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of performance demonstrated.</p>	10

Psychophysiology

Продолжительность проведения мероприятия промежуточной аттестации: **2 часа**

Условия проведения мероприятия: **в часы аудиторной работы**

Максимальный балл, выставляемый за мероприятие промежуточной аттестации: **40**

Проходной балл: **17**

Показатели оценивания	Баллы
<p>Completeness of the answer: a student demonstrates knowledge of the definitions, basic concepts, can show different points of view (if the question involves, characterizes concepts (positions) of different authors), reveals the content of the question: - general patterns and mechanisms of growth and development of the child's body at various stages of ontogenesis, the main periods of human development; - a role of heredity and environment in the human body formation, their importance as risk factors for violations of the physical and neuropsychic development and health of a child; - criteria for determining biological age; - a role of regulatory systems in the child's body formation; - features of functioning of central, sensory, motor and visceral systems at different age stages; - anatomical and physiological basis of higher nervous activity in children;- physiological basics of mental functions: memory, perception, attention, emotions; - the modern concept of health, its role as an adequate criterion for the environment wellness; direct and indirect indicators of health; health criteria and their role in maintaining the health of a healthy child; - measures of injury prevention and first aid; - types of emergency conditions, their causes, the essential rules of first aid in case of emergency conditions. - a set of techniques for cardiopulmonary resuscitation and indications for it; - modern approaches to hygienic regulation of child's environmental factors, their role in maintaining the homeostasis of the child's body. - physiological basics of organizing optimal conditions for the educational process, independent work, work and rest routine, increasing efficiency and functionality of a developing organism (including for children with special educational needs). - basic hygienic requirements aimed at maintaining and strengthening the health of schoolchildren The maximum score is given if the student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of performance demonstrated.</p>	10
<p>Awareness of the answer, understanding of the studied material: a student reveals the understanding of the material, can substantiate his or her opinion, apply knowledge in practice, give the necessary examples not only from the textbook, but also independently compiled, can give an analysis; a student knows how to – use the acquired theoretical and practical skills for organizing scientific, methodological, socio-pedagogical and teaching activities; – use knowledge of anatomy, physiology and health-saving technologies for rational organization of the process of education and upbringing, an individual approach in teaching, educating and maintaining the health of learners (including for children with special educational needs); - provide first aid for various types of injuries and emergency conditions in emergency situations; - work with dummies and tables, with special literature, compile summaries and abstracts of articles; – implement preventive principles of a healthy lifestyle in working with children – 10 points</p>	10

<p>A student possesses - methods and skills of complex diagnostics for assessing the functional development of children and their learning readiness; - skills of estimation of certain indicators of higher mental functions and individual typological personality traits (memory capacity, attention, performance, HNA type and temperament, etc);- skills of rendering first aid for various types of injuries and emergency conditions in emergency situations; - skills of applying sanitary and epidemiological norms and rules in the organization of the educational process, increasing the efficiency of learners in various types of educational and labor activities (including for children with special educational needs). The maximum score is given if the student demonstrated all of the listed characteristics. If not, the maximum score is multiplied by the proportion of performance demonstrated.</p>	<p>10</p>
<p>Answer profoundness: a student is supposed to demonstrate knowledge of definitions of terms and basic concepts, can show different points of view (if the question involves, characterizes concepts (positions) of different authors), reveals the content of the question: a student gives a clear and correct answer without any mistakes and errors; presents his or her own analysis and evaluation of the material presented, gives examples, disclosure of possible difficulties and mistakes of learners, their causes and work to eliminate them; gives a clear and competent answer.</p>	<p>10</p>