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MINISTRY OF EDUCATION AND SCIENCE OF RUSSIA

**Federal State Budgetary Educational Institution
of higher education**

**«I.N. Ulianov Chuvash State University»
(FSBEI of HE «I.N. Ulianov Chuvash State University»)**

Medical Faculty

Pediatric Dentistry Department

«APPROVE»

Vice-rector for Academic Affairs


I.E. Poverinov

« 13 » 04 2022

**Working programs of the discipline (module)
«Гнатология в ортодонтии / Gnathology in Orthodontics»**

Direction of training / specialty 31.05.03 Стоматология / Dentistry
Graduate's qualification Врач-стоматолог / Dental Practitioner

Direction (profile) / specialization «Dentistry»

Form of training – очная / intramural

Course – 5

Term – 10

Total academic hours/credit points – 108/3

The year of beginning the training – 2022

The fundamental document for compiling the working program of the discipline (module)
Федеральный государственный образовательный стандарт высшего образования -
специалитет по специальности 31.05.03 Стоматология (приказ Минобрнауки России от
12.08.2020 г. № 984)

Approved by:

Head of the department, Candidate of Medical Sciences K.V. Losev

The working program was approved at the meeting of the Pediatric Dentistry Department,
25.03.2022, protocol № 8

Head of the department K.V. Losev

Approved by

Dean of the Medical Faculty V.N. Diomidova

Acting Head of the Educational and Methodological Department E.A. Shirmanova

1. The purpose and objectives of training in the discipline (module)

The purpose of the discipline -

training of a general practitioner dentist for independent professional activity and performing basic functions – therapeutic, diagnostic, preventive, advisory, assistance.

The objectives of the discipline -

- to acquaint the student with the anatomical and physiological features of the temporomandibular joint in children at various age periods, and anatomical and physiological TMJ of an adult;

- to acquaint the student with the biomechanics of the dental system and its changes in different age periods;

- the influence of the growth and development of the dental apparatus, external and internal risk factors on the occurrence and clinical course of TMJ diseases in both children and adolescents and adults;

- to acquaint with the features of the diagnosis and treatment of these diseases, and the outcomes depending on age, the possibilities of rehabilitation after diseases (medical and social) and ways of its implementation;

- teach the student to perform individual medical manipulations.

2. The place of practical training in the structure of the educational program of higher education

The discipline «Гнатология в ортодонтии / Gnathology in Orthodontics» относится к обязательной части учебного плана refers to the mandatory part in the curriculum of the educational program of higher education (hereinafter referred to as the EP of HE) in the field of training / specialty 31.05.03 Стоматология, direction (profile) / specialization of the program «Dentistry».

Previous academic disciplines (modules) and (or) practices that form the knowledge, skills and abilities necessary for training in the discipline (module):

Ортопедическая стоматология / Orthopaedic Dentistry

Челюстно-лицевая хирургия / Maxillofacial Surgery

Детская стоматология / Pediatric Dentistry

Психиатрия и наркология / Psychiatry and Addiction Medicine

Фтизиатрия / Phthisiology

Внутренние болезни / Internal Diseases

Оториноларингология / Otorhinolaryngology

Неврология / Neurology

Хирургические болезни / Surgical Diseases

Ортодонтия и детское протезирование / Orthodontia and Pediatric Prosthetics

Производственная практика (клиническая практика по стоматологии общей практики) / On-the-job training (clinical practice in general dentistry)

3. Planned learning outcomes in the discipline (module), correlated with the planned learning outcomes

Planned learning outcomes in the discipline (module), correlated with the planned learning outcomes

Code and name of the competence	Code and name of the competence achievement	Descriptors for the indicator of competence achievement (learning)
ОПК-5 Способен	ОПК-5.1 Способен	алгоритм обследования

<p>проводить обследование пациента с целью установления диагноза при решении профессиональных задач / He/she is able to conduct a patient's examination in order to make a diagnosis when solving professional problems</p>	<p>применять алгоритм обследования пациента / He/she is able to apply the algorithm of patient's examination</p>	<p>пациента /patient examination algorithm применять алгоритм обследования пациента / apply the patient examination algorithm обследовать пациента и устанавливать диагноз / examine the patient and establish a diagnosis</p>
<p>ОПК-5 Способен проводить обследование пациента с целью установления диагноза при решении профессиональных задач / He/she is able to conduct a patient's examination in order to make a diagnosis when solving professional problems</p>	<p>ОПК-5.2 Способен применять навыки обследования пациента (сбор жалоб, анамнеза, физикальное обследование) / He/she is able to apply the skills of examining the patient (collecting complaints, taking the history, carrying out physical examination)</p>	<p>алгоритм обследования пациента /patient examination algorithm находить контакт с пациентом, следовать алгоритму обследования пациента / find contact with the patient, follow the patient examination algorithm фиксировать жалобы, факты анамнеза и результаты физикального обследования в виде логических цепочек / record complaints, anamnesis facts and results of physical examination in the form of logical chains</p>
<p>ОПК-5 Способен проводить обследование пациента с целью установления диагноза при решении профессиональных задач / He/she is able to conduct a patient's examination in order to make a diagnosis when solving professional problems</p>	<p>ОПК-5.3 Способен анализировать информацию полученную при обследовании пациента / He/she is able to analyze the information obtained during the patient's examination</p>	<p>правила построения диагноза / rules for constructing a diagnosis анализировать информацию, полученную от пациента / analyze the information received from the patient методикой формулирования диагноза на основании полученных данных</p>
<p>ПК-1 Способен провести обследования пациента с целью установления диагноза / He/she is able to perform a patient's examination in order to make a diagnosis</p>	<p>ПК-1.1 Способен провести физикальное обследования пациента (сбор жалоб и анамнеза, осмотр, пальпация, перкуссия) / He/she is able to conduct a patient's physical examination (taking a history, inspection, palpation, percussion)</p>	<p>Алгоритм проведения физикального обследования / Algorithm of physical examination последовательно формулировать вопросы / consistently formulate questions методикой осмотра, пальпации, перкуссии челюстно-лицевой области / the method of examination, palpation, percussion of the maxillofacial region</p>
<p>ПК-1 Способен провести обследования пациента с</p>	<p>ПК-1.2 Способен анализировать</p>	<p>алгоритм постановки диагноза, диагнозы, встречающиеся на</p>

целью установления диагноза / He/she is able to perform a patient's examination in order to make a diagnosis	информацию, полученную при проведении физикального обследования, дополнительных методов исследования, сформулировать предварительный диагноз / He/she is able to analyze the information obtained during the physical examination, additional examination methods, formulate a preliminary diagnosis	стоматологическом приеме у пациентов / the algorithm of diagnosis, diagnoses encountered at the dental reception in patients сопоставлять, полученные от пациента данные, а также данные дополнительных методов обследования в логические цепочки / compare the data received from the patient, as well as the data of additional examination methods into logical chains методикой формулирования диагноза / the method of diagnosis formulation
ПК-1 Способен провести обследования пациента с целью установления диагноза / He/she is able to perform a patient's examination in order to make a diagnosis	ПК-1.3 Способен сформулировать диагноз на основании полученной информации / He/she is able to formulate a preliminary diagnosis on the basis of information obtained	диагнозы, встречаемые на стоматологическом приеме / diagnoses encountered at the dental reception интерпретировать данные, полученные в результате клинических и дополнительных методов обследования пациента / interpret the data obtained as a result of clinical and additional methods of examination of the patient алгоритмом формулирования диагноза / the algorithm of diagnosis formulation

4. Structure, scope and content of the discipline (module)

Educational activities in the discipline (module) are carried out:

- in the form of students' face-to-face work with the teaching staff of the organization and (or) persons involved by the organization to implement the educational programs on other terms (hereinafter - contact work);

- in the form of students' independent work.

Face-to-face work can be classroom-based, extramural, as well as it can be conducted in an electronic information and educational environment (EIEE).

Learning sessions in the discipline (module) and interim assessment of students are conducted in the form of face-to-face work and in the form of students' independent work.

During learning sessions in the discipline (module) face-to-face work includes: lecture-type classes, seminar-type classes and (or) group consultations, and (or) individual work of students with the teaching staff of the organization and (or) persons involved by the organization to implement the educational programs on other terms (including individual consultations).

Legend:

Lec – lectures, Lab – laboratory work, Pr – practical classes, ICW – individual face-to-face work, IW – independent work.

4.1. Content of the discipline (module)

Section name	The section's content	Formed competences	Competence achievement indicator
Биомеханика зубочелюстной системы и ее функциональный анализ / Biomechanics of the dental system and its functional analysis	Биомеханика зубочелюстно-лицевой системы / Biomechanics of the dental system	ОПК-5, ПК-1	ОПК-5.3, ОПК-5.1, ОПК-5.2, ПК-1.1, ПК-1.2, ПК-1.3
	Функциональный анализ зубочелюстно-лицевой системы / Functional analysis of the maxillofacial system		
	Артикуляторы. Их виды, применение. Анализ моделей челюстей в артикуляторах. / Articulators. Their types, application. Analysis of jaw models in articulators.		
	Клинико-лабораторные методы исследования / Clinical and laboratory research methods		
Комплексное лечение пациентов с патологией височно-нижнечелюстного сустава, сочетающегося с зубочелюстными аномалиями и деформациями / Comprehensive treatment of patients with pathology of the temporomandibular joint, combined with dental anomalies and deformities	Основные направления комплексного лечения пациентов / The main directions of complex treatment of patients		ОПК-5.3, ПК- 1.2
Комплексное лечение пациентов с патологией височно-нижнечелюстного	Лечебно-диагностические аппараты. Показания к шинотерапии. / Medical		

сустава, сочетающегося с зубочелюстными аномалиями и деформациями / Comprehensive treatment of patients with pathology of the temporomandibular joint, combined with dental anomalies and deformities	and diagnostic devices. Indications for hypnotherapy.		
Комплексное лечение пациентов с патологией височно-нижнечелюстного сустава, сочетающегося с зубочелюстными аномалиями и деформациями / Comprehensive treatment of patients with pathology of the temporomandibular joint, combined with dental anomalies and deformities	Нейромышечная стоматология / Neuromuscular Dentistry	ОПК-5, ПК-1	ОПК-5.3, ПК- 1.2
Индивидуальная контактная работа / Individual contact work	индивидуальная контактная работа / Individual contact work		ОПК-5.2, ПК-1.2, ПК-1.3

4.2. Scope of the discipline and types of academic work

Forms of control and types of academic work	Labor intensity of the discipline (module)	
	10	total
1. Face-to-face work:	42,2	42,2
In-class learning in total, including:	42	42
Лекционные занятия (Лек)	14	14
Лабораторные занятия (Лаб)	28	28
Индивидуальная контактная работа (ИКР)	0,2	0,2
2. Independent work of the student:	65,8	65,8
3. Intermediate certification (exam) (зачет)	3а	3а

Total:	academic hours	108	108
	credit units	3	3

№ item	The section's (theme's) name	Face-to face work, including in the electronic information and educational environment, academic hours				IW, academic hours	Total, academic hours
		Lect.	Pr.	Lab.	ICW		
	Биомеханика зубочелюстной системы и ее функциональный анализ / Biomechanics of the dental system and its functional analysis						
1	Биомеханика зубо-челюстно-лицевой системы / Biomechanics of the dental system	2		4		9	15
2	Функциональный анализ зубочелюстно-лицевой системы / Functional analysis of the maxillofacial system	2		4		9	15
3	Артикуляторы. Их виды, применение. Анализ моделей челюстей в артикуляторах. / Articulators. Their types, application. Analysis of jaw models in articulators.	2		4		9	15
4	Клинико лабораторные методы исследования / Clinical and laboratory research methods	2		4		10,8	16,8
	Комплексное лечение пациентов с патологией височно-нижнечелюстного сустава, сочетающегося с зубочелюстными аномалиями и деформациями / Comprehensive treatment of patients with pathology of the temporomandibular joint, combined with dental anomalies and deformities						
5	Основные направления комплексного лечения пациентов / The main directions of complex treatment of patients	2		4		9	15

6	Лечебно-диагностические аппараты. Показания к шинотерапии. / Medical and diagnostic devices. Indications for hypnotherapy.	2		4		10	16
7	Нейромышечная стоматология / Neuromuscular Dentistry	2		4		9	15
	Индивидуальная контактная работа / Individual contact work						
8	индивидуальная контактная работа / Individual contact work				0,2		0,2
Total academic hours		14		28	0,2	65,8	108

4.3. Summary of the discipline (module), structured by sections (topics)

Раздел 1. Биомеханика зубочелюстной системы и ее функциональный анализ / Biomechanics of the dental system and its functional analysis

Тема 1. Биомеханика зубо-челюстно лицевой системы / Biomechanics of the dental system

Лекционное занятие. Биомеханика зубо-челюстно лицевой системы

Основные звенья зубочелюстно-лицевой системы и их функция. Движения нижней челюсти. Окклюзионная поверхность (морфологические и функциональные особенности). Факторы, определяющие рельеф окклюзионной поверхности. Основы окклюзионной диагностики. / Biomechanics of the maxillofacial system

The main links of the maxillofacial system and their function. Movements of the lower jaw. Occlusal surface (morphological and functional features). Factors determining the relief of the occlusal surface. Basics of occlusal diagnostics.

Лабораторное занятие. Биомеханика зубо-челюстно лицевой системы

Основные звенья зубочелюстно-лицевой системы и их функция. Движения нижней челюсти. Окклюзионная поверхность (морфологические и функциональные особенности). Факторы, определяющие рельеф окклюзионной поверхности. Основы окклюзионной диагностики. / Biomechanics of the maxillofacial system

The main links of the maxillofacial system and their function. Movements of the lower jaw. Occlusal surface (morphological and functional features). Factors determining the relief of the occlusal surface. Basics of occlusal diagnostics.

Тема 2. Функциональный анализ зубочелюстно лицевой системы / Functional analysis of the maxillofacial system

Лекционное занятие. Функциональный анализ зубо-челюстно лицевой системы

Физиологический покой нижней челюсти. Амплитуда и характер движения нижней челюсти. Пробы на сжатие и скрип зубов. Функциональные пробы. Индекс дисфункции. Графические методы исследования. Электромиография. Реоартрография. Фоноартрография

/ Functional analysis of the maxillofacial system

Physiological rest of the lower jaw. The amplitude and nature of the movement of the lower jaw. Tests for compression and grinding of teeth. Functional tests. Index of dysfunction. Graphical research methods. Electromyography. Rheoarthrography. Phonoarthrography

Лабораторное занятие. Функциональный анализ зубо-челюстно лицевой системы
Физиологический покой нижней челюсти. Амплитуда и характер движения нижней
челюсти. Пробы на сжатие и скрип зубов. Функциональные пробы. Индекс дисфункции.
Графические методы исследования. Электромиография. Реоартрография.
Фоноартрография

/ Functional analysis of the maxillofacial system

Physiological rest of the lower jaw. The amplitude and nature of the movement of the
lower jaw. Tests for compression and grinding of teeth. Functional tests. Index of dysfunction.
Graphical research methods. Electromyography. Rheoarthrography. Phonoarthrography

Тема 3. Артикуляторы. Их виды, применение. Анализ моделей челюстей в артикуляторах. / Articulators. Their types, application. Analysis of jaw models in articulators.

Лекционное занятие. Артикуляторы. Их виды, применение. Анализ моделей
челюстей в артикуляторах.

Предназначение артикуляторов в диагностике и на этапах лечения и
диспансеризации пациентов с патологией височно-нижнечелюстного сустава.
Классификации артикуляторов. Показания к использованию артикуляторов. Методика
работы с артикулятором с применением лицевой дуги и без нее.

/ Articulators. Their types, application. Analysis of jaw models in articulators.

The purpose of articulators in the diagnosis and at the stages of treatment and medical
examination of patients with pathology of the temporomandibular joint. Classifications of
articulators. Indications for the use of articulators. The method of working with the articulator
using the facial arch and without it.

Лабораторное занятие. Артикуляторы. Их виды, применение. Анализ моделей
челюстей в артикуляторах.

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examination of patients with pathology of the temporomandibular joint. Classifications of
articulators. Indications for the use of articulators. The method of working with the articulator
using the facial arch and without it.

Тема 4. Клинико лабораторные методы исследования / Clinical and laboratory research methods

Лекционное занятие. Клинико лабораторные методы исследования

Клинические методы обследования пациента: сбор жалоб, анамнез, осмотр.
Пальпация височно-нижнечелюстного сустава, пальпация мышц. Проведение
диагностических тестов с нагрузкой.

Дополнительные методы исследования и постановки диагноза

Применение аксиографии. Методы определения и фиксации центрального
соотношения челюстей и терапевтической позиции нижней челюсти. Электромиография
мышц жевательной группы и мышц шеи. Магнитно-резонансная томография.
Рентгенологические методы обследования: телерентгенография, зонография,
компьютерная томография.

/ Clinical and laboratory research methods

Clinical methods of examination of the patient: collection of complaints, anamnesis,
examination. Palpation of the temporomandibular joint, palpation of muscles. Carrying out
diagnostic tests with a load.

Additional methods of research and diagnosis

Application of axiography. Methods for determining and fixing the central ratio of the jaws and the therapeutic position of the lower jaw. Electromyography of the muscles of the masticatory group and neck muscles. Magnetic resonance imaging. X-ray examination methods: telereöntogenography, sonography, computed tomography.

Лабораторное занятие. Клинико лабораторные методы исследования

Клинические методы обследования пациента: сбор жалоб, анамнез, осмотр. Пальпация височно-нижнечелюстного сустава, пальпация мышц. Проведение диагностических тестов с нагрузкой.

Дополнительные методы исследования и постановки диагноза

Применение аксиографии. Методы определения и фиксации центрального соотношения челюстей и терапевтической позиции нижней челюсти. Электромиография мышц жевательной группы и мышц шеи. Магнитно-резонансная томография. Рентгенологические методы обследования: телерентгенография, зонография, компьютерная томография.

/ Clinical and laboratory research methods

Clinical methods of examination of the patient: collection of complaints, anamnesis, examination. Palpation of the temporomandibular joint, palpation of muscles. Carrying out diagnostic tests with a load.

Additional methods of research and diagnosis

Application of axiography. Methods for determining and fixing the central ratio of the jaws and the therapeutic position of the lower jaw. Electromyography of the muscles of the masticatory group and neck muscles. Magnetic resonance imaging. X-ray examination methods: telereöntogenography, sonography, computed tomography.

Раздел 2. Комплексное лечение пациентов с патологией височно-нижнечелюстного сустава, сочетающегося с зубочелюстными аномалиями и деформациями / Comprehensive treatment of patients with pathology of the temporomandibular joint, combined with dental anomalies and deformities

Тема 5. Основные направления комплексного лечения пациентов / The main directions of complex treatment of patients

Лекционное занятие. Основные направления комплексного лечения пациентов
Планирование тактики ведения пациентов

Психологическая коррекция. Медикаментозное лечение. Физиотерапия. Массаж. Аутогенная тренировка. Лечебно-диагностические аппараты. Избирательное пришлифовывание зубов как метод лечения дисфункций ВНЧС. Создание стабильной окклюзии.

/ The main directions of complex treatment of patients Planning of tactics of management of patients

Psychological correction. Medical treatment. Physical therapy. Massage. Autogenic training. Medical and diagnostic devices. Selective grinding of teeth as a method of treatment of TMJ dysfunctions. Creating a stable occlusion.

Лабораторное занятие. Основные направления комплексного лечения пациентов
Планирование тактики ведения пациентов

Психологическая коррекция. Медикаментозное лечение. Физиотерапия. Массаж. Аутогенная тренировка. Лечебно-диагностические аппараты. Избирательное пришлифовывание зубов как метод лечения дисфункций ВНЧС. Создание стабильной окклюзии.

/ The main directions of complex treatment of patients Planning of tactics of management of patients

Psychological correction. Medical treatment. Physical therapy. Massage. Autogenic training. Medical and diagnostic devices. Selective grinding of teeth as a method of

treatment of TMJ dysfunctions. Creating a stable occlusion.

Тема 6. Лечебно-диагностические аппараты. Показания к шинотерапии. / Medical and diagnostic devices. Indications for hypnotherapy.

Лекционное занятие. Лечебно-диагностические аппараты. Показания к шинотерапии

Классификация лечебно-диагностических аппаратов. Показания к применению шин, накусочных пластинок, ретенционных аппаратов

/ Medical and diagnostic devices. Indications for hypnotherapy

Classification of medical and diagnostic devices. Indications for the use of tires, bite plates, retention devices

Лабораторное занятие. Лечебно-диагностические аппараты. Показания к шинотерапии

Классификация лечебно-диагностических аппаратов. Показания к применению шин, накусочных пластинок, ретенционных аппаратов

/ Medical and diagnostic devices. Indications for hypnotherapy

Classification of medical and diagnostic devices. Indications for the use of tires, bite plates, retention devices

Тема 7. Нейромышечная стоматология / Neuromuscular Dentistry

Лекционное занятие. Нейромышечная стоматология

Основные понятия нейромышечной стоматологии: нейромышечная регуляция, миоцентр, нейроэлектростимуляция. Основные физиологические принципы и методы проведения чрезкожной электронейро стимуляции.

/ Neuromuscular Dentistry

The basic concepts of neuromuscular dentistry: neuromuscular regulation, myocentric, neuroelectrostimulation. Basic physiological principles and methods of percutaneous electroneurostimulation.

Лабораторное занятие. Нейромышечная стоматология

Основные понятия нейромышечной стоматологии: нейромышечная регуляция, миоцентр, нейроэлектростимуляция. Основные физиологические принципы и методы проведения чрезкожной электронейро стимуляции.

/ Neuromuscular Dentistry

The basic concepts of neuromuscular dentistry: neuromuscular regulation, myocentric, neuroelectrostimulation. Basic physiological principles and methods of percutaneous electroneurostimulation.

5. Educational technologies

To implement the competence-based approach in the study of the discipline (module), extensive use of active and interactive methods of conducting classes in the educational process is provided:

The following types of educational technologies are used in the process of teaching students: lectures, laboratory classes.

A lecture is an oral systematic and consistent presentation of material on any problem, method, topic of the question, etc. It is an element of a lecture—seminary form of education.

Didactic and educational purposes of the lecture:

- to provide students with modern, holistic, interrelated knowledge, the level of which is determined by the target setting for each specific topic;
- to ensure the creative work of students together with the teacher during the lecture;
- to educate students with professional and business qualities, love for the subject, and develop their independent creative thinking.

The number of questions in a lecture is usually from two to four. Sometimes individual questions are divided into sub-questions that facilitate the presentation and

assimilation of the material. Too fractional division of a two-hour lecture or, conversely, excessively large components are undesirable in logical and psychological-didactic terms. The duration of its parts should be commensurate with the scientific significance of the problems presented.

When conducting laboratory classes, a problem-based approach is used.

Problem classes are based on the logic of consistently simulated problem situations by posing problematic questions or presenting problematic tasks. A problematic situation is a complex contradictory situation created during classes by posing problematic issues, requiring active cognitive activity of students for its correct assessment and resolution.

The problematic issue contains a dialectical contradiction and requires for resolution not the reproduction of known knowledge, but reflection, comparison, search, acquisition of new knowledge or application of previously obtained knowledge.

A problem problem, unlike a problem question, contains additional introductory information and, if necessary, some search guidelines for its solution.

The level of complexity, the nature of the problems depend on the preparedness of the students, the topic being studied and other circumstances.

The solution of problematic tasks and the answer to problematic questions is carried out by students together with the teacher.

The teacher must not only resolve the contradiction, but also show logic, methodology, demonstrate techniques of mental activity proceeding from the dialectical method of cognition of complex phenomena. This takes a lot of time, so the teacher is required to do preliminary work on the selection of educational material and the preparation of the "scenario" of the lesson.

Stages of preparation for the lesson.

- Analysis and selection of the main key material that makes up the logical backbone of the course.

- Selection of the main problems and their transformation into problematic situations (no more than 3-4).

- Thinking through the logic and methods of solving each problem situation.

- Arrangement of the entire content of the practical lesson into an integral system of knowledge and its methodological support.

- Correction and final preparation of the content and methodology of the practical lesson.

Problems are usually solved in groups of 4-6 people.

In the course of solving a problem, students: deepen their knowledge on a specific issue; develop the ability to solve problems by applying principles and procedures (theory); develop social and communicative skills.

The activity of the problem solving groups covers seven stages:

- clarification of the content/meaning of concepts and terms;

- problem definition;

- analysis of the problem and its consequences, i.e. splitting it into its constituent elements or tasks;

- ranking by importance of selected elements/tasks and establishing a link between them;

- formulation of the task;

- search for additional information;

- report to the group with a description of the chosen solution method and its justification.

6. Forms of control and types of evaluation materials for the discipline (module)

Intermediate attestation - evaluation of intermediate and final results of training in the discipline (module).

6.1. Sample list of questions for the credit test

1. Центральное соотношение челюстей: понятие, методы определения. / The central ratio of the jaws: the concept, methods of definition.
2. Анализ модели в артикуляторе. / Analysis of the model in the articulator.
3. Методика снятия анатомических слепков с верхней и нижней челюсти. / The technique of removing anatomical casts from the upper and lower jaw.
4. Артикулятор. / Articulator.
5. Пробы на сжатие и зубов / Compression and teeth tests
6. Строение и функция ВНЧС. / The structure and function of the TMJ.
7. Опрос, осмотр пациента при патологических состояниях ВНЧС. / Interview, examination of the patient with pathological conditions of the TMJ.
8. Мышцы участвующие в движениях н/ч, их функции. / The muscles involved in the movements of the lower jaw, their functions.
9. Пальпация ВНЧС. / Palpation of the TMJ.
10. Заболевания ВНЧС. Артрит. Артроз. Этиология. Патогенез. Клиническая картина. / TMJ diseases. Arthritis. Arthrosis. Etiology. Pathogenesis. Clinical picture.
11. Пальпация жевательных мышц. / Palpation of the masticatory muscles.
12. Снятие слепков альгинатными массажами. / Removal of casts by alginate masses.
13. Дисфункция ВНЧС. Этиология. Патогенез. Клиническая картина. Диагностика. / TMJ dysfunction. Etiology. Pathogenesis. Clinical picture. Diagnostics.
14. Изготовление гипсовой модели. / Production of a plaster model.
15. Понятие окклюзии и артикуляции в ортопедической стоматологии. / The concept of occlusion and articulation in orthopedic dentistry.
16. Препарирование зуба под культевую вкладку. / Preparation of the tooth under the stump tab.
17. Заболевания ВНЧС. Анкилозы. Новообразования. Этиология. Патогенез. Клиническая картина. / TMJ diseases. Ankylosis. Neoplasms. Etiology. Pathogenesis. Clinical picture.
18. Методы определения центрального соотношения. / Methods for determining the central ratio of the jaws.
19. Пародонтит. Причины функциональной перегрузки пародонта. / Periodontitis. Causes of periodontal functional overload.
20. Избирательное шлифование тканей в области суперконтактов. / Selective grinding of tissues in the area of supercontacts.
21. Рентгенологические методы исследования в гнатологии. (МРТ, томография ВНЧС, КТ ВНЧС, ТРГ) / Radiological research methods in hematology. (MRI, TMJ tomography, TMJ CT, TRG)
22. Снятие анатомических слепков силиконовыми массажами. / Removal of anatomical casts with silicone masses.
23. Мышечно-суставная дисфункция. / Musculoskeletal dysfunction.
24. Препарирование под цельнокерамическую коронку / Preparation for an all-ceramic crown
25. Классификация заболеваний ВНЧС. Патология, клиника, этиология. / Classification of TMJ diseases. Pathology, clinic, etiology.
26. Современные методы аппаратной, функциональной диагностики ВНЧС. / Modern methods of hardware, functional diagnostics of TMJ.
27. Пальпация жевательной мускулатуры. / Palpation of the chewing muscles.
28. Современные методы аппаратной, функциональной диагностики жевательной мускулатуры. / Modern methods of hardware, functional diagnostics of chewing muscles.
29. Исследование суставного шума. / The study of articular noise.
30. Характеристика движения нижней челюсти. / Characteristics of the movement

of the lower jaw.

6.2. Sample list of questions for the examination

не предусмотрено

6.3. Suggested themes of term papers (projects)

не предусмотрено

6.4. Suggested themes of term projects

не предусмотрено

6.5. Suggested topics of calculation and graphic works

не предусмотрено

7. Educational, methodological, informational and software support of the discipline (module)

The electronic catalog and electronic information resources provided by the scientific library of the FSBEI of HE "I. N. Ulianov Chuvash State University" are available at the link <http://library.chuvsu.ru/>

7.1. Regulatory documents, standards and rules

Федеральный закон Российской Федерации от 21 ноября 2011 г. N 323-ФЗ "Об основах охраны здоровья граждан в Российской Федерации"

Приказ Министерства здравоохранения РФ от 13 ноября 2012 г. N 910н "Об утверждении Порядка оказания медицинской помощи детям со стоматологическими заболеваниями"

СанПиН 2.1.3. 2630-10 «Санитарно-эпидемиологические требования к организациям, осуществляющим медицинскую деятельность»

7.2. Recommended basic educational and methodological literature

№ item	Name
1	Persin L.S. Orthodontics. Modern Methods of Diagnosing Dental Abnormalities, Dentition and Occlusion : tutorial [Электронный ресурс]:. - Москва: ГЭОТАР-Медиа, 2021. - Режим доступа: https://www.studentlibrary.ru/book/ISBN9785970463376.html

7.3. Recommended supplementary educational and methodological literature

№ item	Name
1	

7.4. List of resources of the "Internet" information and telecommunication network

№ item	Name	Link to the resource
1		

7.5. Software, professional databases, information and reference systems, electronic educational resources and electronic library systems

Software, professional databases, information and reference systems provided by the Informatization Department of the FSBEI of HE "I.N. Ulianov Chuvash State University" are available for download at the link <http://ui.chuvsu.ru> //. The Unified Register of Russian programs for electronic computers and databases, including freely distributed ones, is available at the link reestr.minsvyaz.ru/reestr/.

7.5.1. Licensed and freely distributed software

Microsoft Windows operating System and/or Unix-like operating system and/or mobile operating system;

Office software packages:

Microsoft Office and/or LibreOffice

and (or) OpenOffice and (or) analogues;

Browsers, including Yandex.Browser.

List of software:

7.5.2. Lists of professional databases and (or) information reference systems and (or) electronic library systems and (or) electronic educational resources

8. Material and technical support of the discipline

Classrooms for lecture-type classes in the discipline are equipped with a teacher's automated workplace consisting of: a personal computer/laptop, multimedia equipment with a screen and (or) SMART interactive whiteboard/SMART TV.

The premises for students' independent work are equipped with computer equipment enabling to connect to the Internet and provide access to the electronic information and educational environment of the FSBEI of HE "I.N. Ulianov Chuvash State University".

№ item	Lesson type	Brief description and characteristics of the composition of installations, measuring and diagnostic equipment, computer equipment and experimental automation tools
1		Помещение для самостоятельной работы обучающихся. Оборудование: компьютерная техника с подключением к сети Интернет и доступом к электронной информационно-образовательной среде ФГБОУ ВО «Чувашский государственный университет имени И.Н. Ульянова»
2		Учебная аудитория для занятий семинарского типа, текущего контроля и промежуточной аттестации. Оборудование: учебная доска, учебная мебель, мультимедийное оборудование (проектор, экран, персональный компьютер или ноутбук с необходимым программным обеспечением для тематических иллюстраций и демонстраций, соответствующих программе дисциплины)

3	Лек	Учебные аудитории для занятий лекционного типа, семинарского типа. Оборудование: учебная доска, учебная мебель, мультимедийное оборудование (проектор, экран, персональный компьютер или ноутбук с необходимым программным обеспечением для тематических иллюстраций и демонстраций, соответствующих программе дисциплины)
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9. Means of adapting the discipline teaching to the needs of persons with physical conditions

If necessary, persons with physical conditions can be offered one of the following options for perceiving information, taking into account their individual psychophysical characteristics:

- 1) using e-learning and distance learning technologies.
- 2) using special equipment (enginery) and software in accordance with the students' health restrictions in the Training Centers for Persons with Disabilities and Physical Conditions (hereinafter referred to as special needs) available at the university.

In the course of training, if necessary, the following conditions are provided for persons with visual, hearing and musculoskeletal disorders:

- for persons with visual impairments: educational and methodological materials in printed form in enlarged font; in the form of an electronic document; in the form of an audio file (conversion of educational materials into audio format); in printed form in Braille; individual consultations involving a tactile interpreter; individual assignments and consultations.
- for people with hearing impairments: educational and methodological materials in printed form; in the form of an electronic document; video materials with subtitles; individual consultations involving a sign language interpreter; individual assignments and consultations.
- for persons with disorders of the musculoskeletal system: educational and methodological materials in printed form; in the form of an electronic document; in the form of an audio file; individual assignments and consultations.

10. Guidelines for students to perform independent work

The purpose of the student's independent work (IW) is to consolidate the theoretical knowledge gained and to acquire practical skills in using and performing research of algorithms and data structures when designing application software programs. IW includes independent study of educational issues, preparation for laboratory classes, performing calculation and graphic work, preparation for a test and an exam.

The list of questions and tasks for independent work to prepare for laboratory classes is given in the corresponding methodological instructive regulations in the description of each laboratory work.

The list of questions and tasks for independent work to carry out calculation and graphic work is given in the relevant methodological instructive regulations.

Independent work of students is an integral part of the educational process. The purpose of independent work of students is to master fundamental knowledge, professional skills and skills, experience in creative, research activities.

The main forms of organizing independent work of students are: classroom

independent work under the guidance and supervision of a teacher (at lectures, practical, laboratory classes, etc. and consultations); extracurricular independent work under the guidance and supervision of a teacher (during consultations, during research work), extracurricular independent work - planned educational, research, research work of students, performed during extracurricular time on the assignment and with the methodical guidance of the teacher, but without his direct participation.

Students, when performing independent work, should rely mainly on the knowledge and skills acquired in lectures, practical, laboratory classes, group and individual classes. This provides the necessary basis for further in-depth study of other disciplines. However, this knowledge needs to be activated.

The forms of independent work of students provided by the discipline include:

- Preparation for practical, laboratory classes, group and individual classes.
- Independent study of educational issues.
- Preparation for the test / exam.

The following sources are recommended for independent preparation for practical, laboratory, group and individual classes, study of educational issues, preparation for the test and exam:

- lecture notes and materials of practical, laboratory, group and individual classes;
- educational (scientific) literature of the relevant profile;
- Internet resources.

At the beginning of the course, the teacher informs students about the forms, types and content of independent work, explains the requirements for the results of independent work, as well as forms and methods of control and evaluation criteria.

According to the questions proposed by the teacher, the student studies the content of recommended sections, chapters, paragraphs, textbooks, textbooks and monographs; statistical collections; reviews; articles in periodicals.

11. Methodological instructive regulations for students studying the discipline (module)

Laboratory work is one of the forms of mastering theoretical material with the simultaneous formation of practical skills in the discipline being studied.

The purpose of laboratory work is to deepen the study of theoretical material, the formation of practical skills through regular and systematic independent work of students throughout the course. The process of preparation for laboratory work includes the study of normative legal documents, mandatory and additional literature on the issue under consideration. Direct laboratory work involves:

- study of theoretical material on the topic of laboratory work (on the issues of the topic under study);
- performing the necessary calculations and experiments;
- preparation of the report with filling in the necessary tables, plotting, drawing conclusions on the experiments and theoretical calculations;

control is carried out for each laboratory work: the content of the report is checked, the assimilation of theoretical material is checked. The control of the assimilation of theoretical material is individual.

11.1. Methodological instructive regulations for preparing for seminar-type classes

11.2. Methodological instructive regulations for preparing for an examination

11.3. Methodological instructive regulations for preparing for a test

11.4. Methodological instructive regulations for performing computational and graphical

11.5. Methodological instructive regulations for performing a control work

11.6. Methodological instructive regulations for performing a course work (project)

List of additions and changes

The name and details (if any) of the document attached to the Working Program of the discipline (module) containing the text of updates	Department's decision		Full name of department head:
	Date	Protocol №	