

SYLLABUS

ОПЕРАТИВТІ СТОМАТОЛОГИЯ OPERATIVE DENTISTRY OPERATIVE DENTISTRY



1. General information about the discipline			
1.1	Faculty/School: Higher School of Medicine	1.6	Credits (ECTS): 8 credits - 240 hours (120 contact hours)
1.2	Educational program(OP): 6B10113- DENTISTRY 6B10113- DENTISTRY 6B10113 - DENTISTRY	1.7	<u>Prerequisites:</u> Normal anatomy <u>of a Post-request:</u> Fundamentals of Surgical Dentistry
1.3	Agency and year of accreditation of OP NAAR 2023	1.88	SRS/CPM/CPD(qty): 40 hours
1.4 4	Operational dentistry/ Operative dentistry	1.9	SRSP/SRMP/CPD (qty): 20 hours
1.5	ID Discipline ID: 97272 Discipline code: OS2216	1.10	Required -yes
2. Discipline description			
	The discipline develops knowledge and skills related to the features of the structure and functioning of the maxillofacial region, anatomical features of the structure of temporary teeth and permanent teeth with unformed roots, to the organization of the work of the dental office of the surgical and children's profile, dental materials and tools used at surgical and children's dental appointments, examination features . Cases are considered that take into account clinical cases, anatomical and physiological features of the maxillofacial region, features of an allergic history, age-related features, concomitant diseases that are important for the choice of a drug and the method of anesthesia at a dental appointment.		

3	The purpose of the discipline		
is to develop knowledge and skills on techniques and the choice of method of local anesthesia on the upper and lower jaws. Age-related features (time of teething, change of bite), concomitant diseases that are important for the choice of medication and the method of local injection and non-injection anesthesia at a dental appointment. Forming the foundations for further development of clinical thinking skills.			
4.	Results of training (RO) in the discipline (3-5)		
	RO of the discipline		
1	Apply in practice the knowledge of biomedical, clinical, epidemiological and social-behavioral sciences, including generally accepted, developing and constantly updated knowledge.	proficiency level-2	Apply detailed knowledge of the typical structure and functions of the human body at the level from molecules to cells of organs and the whole body;
2	Characterize the anatomical features and structural features of temporary and permanent teeth in children and adolescents.	proficiency level-2	Apply knowledge of the basic principles of human behavior for effective communication and the treatment and diagnostic process in compliance with the principles of ethics and deontology;
3	Apply knowledge about the organization of the dental office of surgical and children's profile, equipment and equipment in compliance with safety regulations, asepsis and antiseptics	proficiency level-2	Apply knowledge of patient psychology, taking into account cultural characteristics and race; demonstrate teamwork skills, organization and management of the diagnostic and treatment process;
4	Applies knowledge about the neurophysiology of pain, pharmacological pain control. Demonstrates age-appropriate local anesthesia techniques for performing phantom pain control manipulations;	proficiency level-3	3; Effectively build dynamic doctor-patient relationships that occur before, during, and after medical treatment;
5	Demonstrate proficiency in professional terminology for the discipline in Russian, Kazakh and English.	proficiency level-2	Effectively communicate medical information orally and in writing to provide safe and effective patient care; work effectively in an interprofessional / multidisciplinary team with other healthcare professionals;
6	Demonstrates the need for continuous professional training and improvement of their knowledge and skills	proficiency level-3	

5.	Summative assessment methods (<i>check (yes-no) / indicate your own</i>):		
5.1	Тестирование по MCQ testing for understanding and application	5.5	Research project NIRS
5.2	Practical Skills Assessment – DOPS	5.6	360 Degree Assessment-Behavior and professionalism
5.3	3. SRS-creative task	5.7	Boundary control: Stage 1-MCQ testing for understanding and application Stage 2-passing practical skills (DOPS)

6.	Detailed information about the discipline				
6.1	Academic year: 2025-202-2026	6.3.3	Schedule (class days, time): From 8.00 to 13.00		
6.2.2	Semester: 4th semester	6.4	Place (academic building, office, platform and link to the meeting of training with the use of DOT):		
7.	Discipline leader				
Position		Full name	Department	Contact information (tel., e-mail)	Consultations before exams
Teacher		Korol Leyla Ulanovna	of Clinical specialties	+77089710788 leyla_korol@mail.ru	Before the exam session within 60 minutes
8.	Content of the discipline				
	Title of the topic				Hours Form of conducting
1.	Operative dentistry-subject, content of the discipline History of the development of anesthesia in dentistry.				3 Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
2.	Neurophysiology of pain. The mechanism of toothache. Hydrodynamic theory of pain occurrence (Branstrom). The concept of pain sensitivity threshold. Pain analyzer. Pathways of pain sensitivity from the teeth to the kopycerebral cortex. Types of toothache. Quantification of toothache.				4 Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on SRS topics
3.	Asepsis and antiseptics in surgical dental interventions. Methods of treating the doctor's hands and the operating field.				4 Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms

	Surgical instruments used in maxillofacial surgery. Classification, types, functional purpose, principles of use. Requirements for a surgical dental office. Organization of work of the office/department of surgical dentistry.		3. Work in albums 4. Mini-conference topics of SRS
4.	Local anesthetics and vasoconstrictors used in dentistry: Classification of local anesthetics, mechanism of action, toxicity, dosage and requirements for them. Selection of anesthetics for children and adults. Combination with other drugs.	4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on SRS topics
5.	Local anesthesia in dentistry. Goals and objectives of pain management in dentistry. Types of local anesthesia in dentistry. General rules of anesthesia.	3	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on SRS topics
6.	Local anesthesia in dentistry. Indications and contraindications for local anesthesia. Possible complications and errors.	3	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
7.	Anatomical and physiological justification of local anesthesia in the upper jaw in the age aspect. Distinctive (clinical) features of local anesthesia in children and adolescents. Anatomical and topographical features of the structure of the upper jaw in the age aspect. Anatomical and topographical features of the structure of the trigeminal nerve (1-2 branches). Upper jaw blood	sup ply 4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
8.	Anatomical and physiological justification of local anesthesia in the lower jaw in the age aspect. Distinctive (clinical) features of local anesthesia in children and adolescents. Anatomical and topographical features of the structure of the lower jaw in the age aspect. Anatomical and topographical features of the structure of the trigeminal nerve (3rd branch). Blood supply to the lower jaw.	4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
9.	Psychoemotional state in children before dental surgery and ways to correct them.	3	Formative assessment:

			<ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on SRS topics
10.	: Potentiated local anesthesia and premedication in outpatient surgical dentistry in the age aspect. Indications and contraindications. Method of conducting. Medications used for potentiated local anesthesia, premedication.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
11.	Non-injectable methods of anesthesia. Types of application anesthesia. Indications, contraindications, methods of treatment, medications.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics SRS
12.	Practical skills	dev elo pm ent 3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
13.	Injection methods of anesthesia. Types of infiltration anesthesia. Indications and contraindications, method of administration, anesthetics used for infiltration anesthesia.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics SRS
14.	Practical skills	dev elo pm ent 3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS

15.	Soft tissue anesthesia during surgical interventions of the maxillofacial region. Classification. Indications, contraindications, method of administration, anesthetics, dose	4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
16.	Soft tissue anesthesia during surgical interventions of the maxillofacial region. Classification. Indications, contraindications, method of administration, anesthetics, dose. Working on phantoms. Practicing practical skills.	3	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
17.	Border control 1 Format: written work, interactive feedback, practical skills reception (4 hours)		СУММАТИВНОЕ Summative evaluation: 2 stages: Stage 1-MCQ Comprehension and application testing-40% Stage 2-Practical Skills Acquisition (Dops) - 60%
18.	Conducting anesthesia, concept, types. Tuberal anesthesia. Indications and contraindications. Target point, method of implementation. Innervation zone. Possible complications and errors.	4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
19.	Practical skills development.	3	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
20.	Infra-orbital anesthesia. Indications and contraindications. Target point, method of implementation. Blocking zone. Possible complications and errors.	4	Formative assessment: 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
21.	Practical skills development.	3	Formative assessment:

			<ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of SRS
22.	Incisor, palatal anesthesia. Indications and contraindications. Target point, method of implementation. Innervation zone. Possible complications and errors.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
23.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on the topic of SRS
24.	Guide anesthesia on the lower jaw. Мандибулярная Mandibular anesthesia. Indications and contraindications. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
25.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference on the topic of SRS
26.	Guide anesthesia on the lower jaw. Torus anesthesia. Indications and contraindications. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
27.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL.

			<ol style="list-style-type: none"> 2. Work on phantoms 3. Work in albums 4. Mini-conference on the topic of SRS
28.	Guide anesthesia on the lower jaw. Анестезия по Go-Gatesu anesthesia. Anesthesia by Vazirani-Akinosi (Akinosi). Indications and contraindications. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
29.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
30.	Types of central (stem) anesthesia (by method of administration) in maxillofacial practice in the age aspect. Target point. Blocking zone. Indications and contraindications in the age aspect. Method of conducting. Possible complications and errors.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
31.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference of the SRS topic
32.	Общее general anesthesia in surgical dentistry (outpatient, inpatient). Classification of general anesthesia. Indications and contraindications in the age aspect. Sedation. Medications used for general anesthesia.	4	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms 3. Work in albums 4. Mini-conference topics of the SRS
33.	Practical skills development.	3	Formative assessment: <ol style="list-style-type: none"> 1. Using active learning methods: TBL. 2. Work on phantoms

		3. Work in albums 4. Mini-conference topics of the SRS
34.	Boundary control No. 2 - 2 stages (4 hours) written work (testing) acquisition of practical skills	Суммативное Summative assessment: 2 stages: Stage 1-MCQ testing on understanding and application - 40% 2nd stage-Practical skills admission (Dops) - 60%
	Final control (exam)	СуммативноеSummative evaluation: 2 stages: 1st stage-MCQ testing for understanding and application - 40% 2nd stage-OCE - 60%
Total		120 hours
9.	Teaching methods in the discipline (briefly describe the teaching and learning approaches that will be used in teaching) Using active learning methods: TBL, CBL	
1	Methods Formative assessment methods: TBL-Team Based Learning CBL-Case Based Learning	
2	Методы Summative assessment methods (from point 5): 1. MCQ software testing for understanding and application 2. Passing practical skills – miniclinical exam (MiniCex) 3. SRS-creative task 4. Protecting your medical history 5. R & D Research Project	
10.	Summative	
asses smen t No	. of the control form	Weight in % of total %

1	Reception of practical skills	30% (evaluated according to the checklist)	
2	Border control	70%	
Total RC1		30 + 70 = 100%	
1	Oral response	20% (evaluated by checklist)	
2	Klassroom	10% (evaluated by checklist)	
3	R & D research project	10% (estimated on the checklist)	
5	Milestone control	60% (Stage 1-MCQ testing for understanding and application-40%; Stage 2-mini clinical exam (MiniCex) - 60%)	
Total RC2		20+10+10 + 60 = 100%	
9	The exam	has 2 stages: 1st stage-MCQ testing for understanding and application - 40% 2nd stage-OCE with SP - 60%	
10	Final assessment:	ORD 60% + Exam 40%	
10. Evaluation			
Score Letter system	score Digital equivalent	Points (% content)	Description of the assessment (changes can only be made at the level of the decision of the Academic Quality Committee of the Faculty)
A	4.0	95-100	Great. Exceeds the highest task standards.
A -	3.67	90-94	Excellent. Meets the highest standards of the task.
At+	3.33	85-89	Is Good. Very good. Meets the high standards of the assignment.
In	3.0	, 80-84	Is Good. Meets most job standards.
B-	2.67	75-79	Good. More than enough. Shows some reasonable knowledge of the material.

C+	2.33	70-74	Is Good. Acceptable. Meets the main task standards.
From	2.0	65-69	Satisfactory. Acceptable. Meets some of the main task standards.
C-	1.67	60-64	Satisfactory. Acceptable. Meets some of the main task standards.
D+	1,33	55-59	Satisfactory. Minimally acceptable.
D	1,0	50-54	Satisfactory. Minimally acceptable. The lowest level of knowledge and task completion.
FX	0,5	25-49	Unsatisfactory. Minimally acceptable.
F	0	0-24	Unsatisfactory. Very low productivity.

11. Training resources (use the full link and indicate where you can access the texts/materials)

Literature : Additional	local anesthesia in dentistry and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: publishing house Man, 2017.
	Detskaya terapevticheskaya stomatologiya [Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).
	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.
	Handbook of Local Anesthesia Seventh Edition by Stanley F. Malamed, 2020
	Essentials of Oral Biology Second Edition by Maji Jose, 2017

Electronic Resources	<p>Online-Resources:</p> <p>1. SciDrugs - https://www.youtube.com/c/SciDrugs/videos://www.youtube.com/c/SciDrugs/videos-video lectures on pharmacology in Russian.</p> <p>https://dentalmagazine.ru/posts/istorija-odnogo-izobretenija-anestezija.html</p> <p>https://www.critical.ru/actual/stolyarenko/stom_anest_1.htm</p> <p>https://stomatologclub.ru/video/terapiya-10/zubnaya-bol-pochemu-bolit-zub-prichinyi-vozniknoveniya-gidrodinamicheskaya-teoriya-zubnoy-boli-361/https://ru.wikipedia.org/wiki/%D0%93%D0%B8%D0%B4%D1%80%D0%BE%D0%B4%D0%B8%D0%BD%D0%B0%D0%BC%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B0%D1%8F_%D1%82%D0%B5%D0%BE%D1%80%D0%B8%D1%8F</p> <p>https://ru.wikipedia.org/wiki/%D0%93%D0%B8%D0%B4%D1%80%D0%BE%D0%B4%D0%B8%D0%BD%D0%B0%D0%BC%D0%B8%D1%87%D0%B5%D1%81%D0%BA%D0%B0%D1%8F_%D1%82%D0%B5%D0%BE%D1%80%D0%B8%D1%8F</p> <p>https://ec.europa.eu/programmes/erasmus-plus/project-result-content/51ee5e11-4cb2-4e1e-8c85-d63eeda533bf/%D0%9F%D0%9E%D0%A1%D0%9E%D0%91%D0%98%D0%95%D20%D0%92%D0%A4%D0%93%D20%D02.pdf</p> <p>https://science-education.ru/article/view?id=27060</p> <p>Fomenko I. V., Kasatkina A. L., Melnikova D. V., Melnikov P. Yu., Gnidina A. V. Analysis of the level of anxiety in children at amban outpatient surgical reception). Sovremennye problemy nauki i obrazovaniya [Modern problems of Science and Education]. 2017. № 5. ;</p> <p>URL: https://science-education.ru/ru/article/view?id=27060(accessed: 25.01.2026).</p>
Simulators in the simulation center	
Special software	<ol style="list-style-type: none"> 1. Google classroom – freely available. 2. Medical calculators: Medscape, Doctor's Handbook, MD+Calc - freely available. 3. Handbook of diagnostic and treatment protocols for medical workers from RCRS, Ministry of Health of the Republic of Kazakhstan: Dariger - available in free access.
12.	Student requirements and bonus system

Bonus system:

For extraordinary achievements in the field of future professional activity (clinical, scientific, organizational, etc.), students can receive additional points up to 10% of the final assessment (by the decision of the department).

13.	Discipline Policy (please do not change the parts highlighted in green)
	<p>The policy of the discipline is determined by the Academic Policy of the University and the Academic Integrity Policy of the University. If the links do not open, then you can find up-to-date documents in the Univer IP.</p> <p>Rules of professional behavior:</p> <p>1) Appearance:</p> <ul style="list-style-type: none">✓ office style of clothing (shorts, short skirts, open T-shirts are not allowed to attend the university, jeans are not allowed in the clinic)✓ clean ironed dressing gown✓ medical mask✓ medical cap (or a neat hijab without hanging ends)✓ medical gloves✓ change of shoes✓ neat hairstyle, long hair should be gathered in a ponytail, or bun, both for girls and boys. Neatly cropped nails. Bright, dark manicure is prohibited. It is acceptable to cover your nails with clear varnish.✓ badge with full name (in full) <p>2) Mandatory presence of a phonendoscope, tonometer, centimeter tape, (you can also have a pulse oximeter)</p> <p>3) *Properly issued sanitary (medical) book (before the start of classes and must be updated in due time)</p> <p>4) * Availability of a vaccination passport or other document on a fully completed course of vaccination against COVID-19 and influenza</p> <p>5) Mandatory compliance with personal hygiene and safety regulations</p> <p>6) Systematic preparation for the educational process.</p> <p>7) Accurate and timely maintenance of accounting documentation.</p> <p>8) Active participation in medical-diagnostic and social events of departments.</p> <p>Ca tudent that does not meet the requirements of its appearance and/or that emits a strong/pungent smell, since such a smell can provoke an undesirable reaction in the patient (obstruction, etc.) – is not allowed to patients!</p> <p>The teacher has the right to make a decision on admission to classes for students who do not meet the requirements of professional behavior, including the requirements of the clinical base!</p> <p>Academic discipline:</p> <p>1. You can't be late for classes or a morning conference. If you are late, the decision on admission to the lesson is made by the</p>

teacher leading the lesson. If there is a valid reason, inform the teacher about the delay and the reason by message or by phone. After the third delay, the student writes an explanatory note to the head of the department, indicating the reasons for the delay, and is sent to the dean's office for admission to the class. If you are late without a valid reason, the teacher has the right to withdraw points from the current assessment (1 point for each minute of delay).

2. Religious events, holidays, etc. are not a valid reason for skipping, being late, or distracting the teacher and group from work during classes.

3. If you are late for a valid reason – do not distract the group and the teacher from the lesson and go quietly to your seat.

4. Leaving a class earlier than the scheduled time, or being outside the workplace during school hours is considered a truancy.

5. Additional work of students during school hours (during practical classes and duties) is not allowed.

6. For students who have more than 3 passes without notifying the curator and a valid reason, a report is issued with a recommendation for expulsion.

7. Missed classes are not processed.

8. Students are fully subject to the Internal rules of the clinical bases of the department

9. To greet the teacher and any older person by getting up (in class)

10. Smoking (including the use of vapes, e-cigarettes) strictly prohibited on the territory of medical institutions (out-doors) and the university. Punishment-up to cancellation of border control, in case of repeated violation-the decision on admission to classes is made by the head of the department

11. of Respect for colleagues, regardless of gender, age, nationality, religion, sexual orientation.

12. Have a laptop / laptop / tab / tablet with you for training and passing MCQ tests on TBL, boundary and final controls.

13. Сдача тестов Taking MCQ tests on phones and smartphones is strictly prohibited.

The student's behavior during exams is regulated by the "Rules for conducting final control", "Instructions for conducting final control of the autumn / spring semester of the current academic year" (up-to-date documents are uploaded to IS "Univer" and updated before the session starts); "Regulations on checking students' text documents for borrowing".

14	<p>1. Constantly preparing for classes: For example, it supports statements with relevant links, makes brief summaries, demonstrates effective learning skills, and helps others learn</p> <p>2. Take responsibility for your training: For example, it manages its own training plan, actively tries to improve itself, and critically evaluates information resources</p> <p>3. Actively participate in the group's training: For example, they actively participate in discussions and are willing to take tasks</p> <p>4. Demonstrate effective group skills For example, it takes the initiative, shows respect and correctness towards others, and helps resolve misunderstandings and conflicts.</p> <p>5. Proficient communication skills with peers: For example, actively listens, and is receptive to nonverbal and emotional cues Respectful attitude</p> <p>6. Highly developed professional skills: Committed to completing assignments, looking for opportunities for more training, confident and qualified Compliance with ethics and deontology in relation to patients and medical staff Compliance with subordination.</p> <p>7. High introspection: For example, it recognizes the limitations of its knowledge or abilities without taking the defensive or rebuking others</p> <p>8 Highly developed critical thinking: For example, the student demonstrates skills in performing key tasks, such as generating hypotheses, applying knowledge to cases from practice, critically evaluating information, making conclusions out loud, explaining the reflection process</p> <p>9. Fully complies with the rules of academic behavior with understanding, suggests improvements to improve performance. Adheres to the ethics of communication-both oral and written (in chats and messages)</p> <p>10. Fully adheres to the rules with full understanding of them, encourages other group members to adhere to the rules Strictly adheres to the principles of medical ethics and PRIMUM NON NOCER</p>
15.	<p>Distance/online learning – prohibited in a clinical discipline (please do not change the parts highlighted in green)</p>
<p>1. According to the Order of the Ministry of Education and Science of the Republic of Kazakhstan No. 17513 dated October 9, 2018 "On approval of the List of areas of training of personnel with higher and postgraduate education, training in which in the form of external and online training is not allowed"</p>	

According to the above-mentioned regulatory document, specialties with the code of health care disciplines: bachelor's degree (6B101), master's degree (7M101), residency (7R101), doctoral studies, (8D101) - training in the form of external and online training is **not allowed**.

Thus, students are prohibited from distance learning in any form. It is allowed only to work out a class in the discipline in connection with the absence of a student for a reason beyond his control and the availability of a timely confirmation document (for example: a health problem and presentation of a supporting document - a medical certificate, a NSR signal sheet, an extract from a consultation appointment with a medical specialist).

16. Approval and review		
of the actinghead of the department		Abdikarimov S. Zh
. Committee on the Quality of teaching and Training of the Faculty	Protocol No . Date of approval	
Dean	Signature	Kalmakhanov S. B.

Thematic plan and content of classes

#	Topic	Content	Literature	Form of conducting
1.	Operative dentistry-subject, content of the discipline History of analgesia development in dentistry.	The student should know: goals and objectives of the discipline	Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Local anesthesia in dentistry and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.- SPb: publishing house Man, 2017. https://dentalmagine.ru/posts/istorija-odnogo-izobretenija-anestezija.html https://dentalmagine.ru/posts/istorija-odnogo-izobretenija-anestezija.html https://www.critical.ru/actual/stolyarenko/stom_anest_1.htm	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
2.	Neurophysiology of pain. The mechanism of toothache. Hydrodynamic theory of pain occurrence (Branstrom). The concept of pain sensitivity threshold. Pain analyzer. Pathways of pain sensitivity from the teeth to the <i>ko-pycerebral cortex</i> . Types of toothache. Quantification of toothache.	The student should know: The mechanism of toothache. Hydrodynamic theory of pain occurrence (Branstrom). The concept of pain sensitivity threshold. Pain analyzer. Pathways of pain sensitivity from the teeth to the <i>ko-pycerebral cortex</i> . Types of	https://stomatologclub.ru/video/terapiya-10/zubnaya-bol-pochemu-bolit-zub-prichinyi-voznikneniya-gidrodinamicheskaya-teoriya-zubnoy-boli-361/ https://ru.wikipedia.org/wiki/%D0%93%D0%B8%D0%B4%D1%80%D0%BE%D0%B4%D0%B8%D0%BD%D0%BC%D0%B8%D1%87%D0%B5%D1%88	Формативное оценивание: 1. TBL 2. Work on phantoms 3. Work in the albums

		<p>toothache. Quantification of toothache.</p> <p>Schematically sketch the pathways of pain sensitivity transmission from the upper and lower jaw teeth to the central nervous system.</p>	<p>1%D0%BA%D0%B0%D1%8F_%D1%82%D0%B5%D0%BE%D1%80%D0%B8%D1%8F</p>	
3.	<p>Aseptics and antiseptics for surgical dental interventions. Methods of treating the doctor's hands and the operating field.</p> <p>Surgical instruments used in maxillofacial surgery. Classification, types, functional purpose, principles of use. Requirements for a surgical dental office. Organization of work of the office/department of surgical dentistry.</p>	<p>The student should know:</p> <p>Asepsis and antiseptics in surgical dental procedures.</p> <p>Methods of treatment of the doctor's hands and the operating field a type of syringes, needles. Carpool technology.</p> <p>Organization of the work of the office/department of surgical dentistry.</p> <p>Draw a table of anesthetics, doses in the age aspect, time of action</p>	<p>Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. Using TBL, 2. Working on phantoms 3. Working in albums
4.	<p>Local anesthetics and vasoconstrictors used in dentistry:</p> <p>Classification of local anesthetics, mechanism of action,</p>	<p>The student should know:</p> <p>Classification of local anesthetics, indications and contraindications, dose, methods of administration, toxicity of the drug, time of elimination from the body. Storage and transportation methods.</p>	<p>Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. Using TBL 2. Working on phantoms 3. Working in albums

	<p>toxicity, dosage and requirements for them. Selection of anesthetics for children and adults. Combination with other drugs.</p>	<p>Sketch in albums surgical instruments</p>	<p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	
5.	<p>Local anesthesia in dentistry. Goals and objectives of pain management in dentistry. Types of local anesthesia in dentistry.</p> <p>General rules of anesthesia.</p>	<p>The student should know:</p> <p>Classification of local anesthesia. The method of anesthesia. Indications and contraindications for the type of anesthesia. Draw a technique for performing a type of anesthesia in the album.</p>	<p>Electronic resources</p> <p>https://jirbis/kaznu.kz/jirbisjirbis/kaznu.kz/jirbis2</p> <p>https://elib/kaznu.kz/Формативноeelib/kaznu.kz/</p>	<p>rating:</p> <ol style="list-style-type: none"> 1. Using TBL 2. Working on phantoms 3. Working in albums
6.	<p>Local anesthesia in dentistry. Indications and contraindications for local anesthesia. Possible complications and errors.</p>	<p>The student should know:</p> <p>Classification of local anesthesia. The method of anesthesia. Indications and contraindications for the type of anesthesia. Draw a technique for performing a type of anesthesia in the album.</p>	<p>Detskaya terapevticheskaya stomatologiya [Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. Using TBL 2. Work on phantoms 3. Work in albums

7.	<p>Anatomical and physiological justification of local anesthesia in the upper jaw in the age aspect. Distinctive (clinical) features of local anesthesia in children and adolescents.</p> <p>Anatomical and topographical features of the structure of the upper jaw in the age aspect. Anatomical and topographical features of the structure of the trigeminal nerve (1-2 branches). Blood supply to the upper jaw</p>	<p>The student should know:</p> <p>Anatomical-physiological and anatomical-topographic features of the structure of the upper jaw, natural openings in the age aspect.</p> <p>The structure of the trigeminal nerve.</p> <p>Draw a diagram of the structure of the trigeminal nerve (1-2 branches) in the album.</p> <p>Draw a diagram of the structure of the common carotid and facial arteries /veins of the CHLO in the album.</p> <p>List: anatomical and topographical features of the CHLO.</p>	<p>Detskaya terapevticheskaya stomatologiya [Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. Using TBL 2. Work on phantoms 3. Work in albums
8.	<p>Anatomical and physiological justification of local anesthesia on the lower jaw in the age aspect. Distinctive (clinical) features of local anesthesia in children and adolescents.</p> <p>Anatomical and topographical features of the structure of the lower jaw in the age aspect. Anatomical and topographical features of the structure of the trigeminal nerve (3rd branch). Blood supply to the lower jaw.</p>	<p>The student should know:</p> <p>Anatomical-physiological and anatomical-topographic features of the structure of the lower jaw, natural openings in the age aspect.</p> <p>The structure of the trigeminal nerve.</p> <p>Draw a diagram of the structure of the trigeminal nerve (branch 3) in the album.</p> <p>Draw a diagram of the structure of the common carotid and facial arteries /veins of the CHLO in the album.</p>	<p>Detskaya terapevticheskaya stomatologiya [Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. Using TBL 2. Working on phantoms 3. Working in albums

		List: anatomical and topographical features of the CHLO.	enko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.	
9.	Psychoemotional state of children before dental surgery and ways to correct them.	The student should know: Types of the child's psychoemotional state on the stom. surgical admission (Frankl anxiety scale) List: types of psychoemotional state.	Electronic resources: https://ec.europa.eu/programmes/erasmus-plus/project-result-content/51ee5e11-4cb2-4e1e-8c85-d63eeda533bf/%D0%9F%D0%9E%D0%A1%D0%9E%D0%91%D0%98%D0%95%20%D0%92%D0%A4%D0%93%20%202.pdf https://science-education.ru/article/view?id=27060 Fomenko I. V., Kasatkina A. L., Melnikova D. V., Melnikov P. Yu., Gnidina A.V. Analysis of the level of anxiety in children at amban outpatient surgical reception). Sovremennye problemy nauki i obrazovaniya [Modern problems of Science and Education]. 2017. № 5. ; URL: https://science-education.ru/ru/article/view?id=27060 (accessed: 25.01.2026).	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
10.	Potentiated local anesthesia and pre-medication in outpatient surgical dentistry in the ageaspect. Indications and	The student should know: Potentiated anesthesia-concept, goals, tasks. Premedication is a concept, goal, and task. Indications and contraindications for anesthesia. List medications,	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

	contraindications. Method of conducting. Medications used for potentiated local anesthesia, premedication.	doses, and methods of treatment by age. Draw a method for performing types of anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.	
11.	Non-injectable methods of pain relief. Types of application anesthesia. Indications, contraindications, methods of treatment, medications.	The student should know: Non-injectable and injectable methods. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Draw a method for performing types of anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums
12.	Practicing practical skills.	The student should know: Non-injectable and injectable methods. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.	in Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

		<p>Work out on the phantom methods of performing types of anesthesia. List the indications and contraindications.</p> <p>List: possible errors and complications</p>	<p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	
13.	Injectable methods of pain relief. Types of infiltration anesthesia. Indications and contraindications, method of administration, anesthetics used for infiltration anesthesia.	<p>The student should know: Injection methods. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.</p> <p>Draw a method for performing types of anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Working on phantoms 3. Working in albums
14.	Practicing practical skills	<p>The student should know: Injection methods. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.</p>	<p>in Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Work on phantoms 3. Work in albums

		<p>Work out the method of performing types of anesthesia on the phantom. List the indications and contraindications. List: possible errors and complications</p>	<p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	
15.	Anesthesia of soft tissues during surgical interventions of the maxillofacial region. Classification. Indications, contraindications, method of administration, anesthetics, dose	<p>The student should know: Methods of anesthesia of soft tissues of CHLO. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.</p> <p>Draw a method for performing types of anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Work on phantoms 3. Work in albums
16.	Anesthesia of soft tissues during surgical interventions of the maxillofacial region. Classification. Indications, contraindications, method of administration, anesthetics, dose. Working on phantoms. Practicing practical skills.	<p>The student should know: Methods of anesthesia of soft tissues of CHLO. Indications and contraindications for anesthesia. List medications, doses, and methods of</p>	<p>in Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Work on phantoms 3. Work in albums

		<p>treatment in the age aspect. лекарственные препараты, дозы, методику проведения в возрастном аспекте.</p> <p>Work out the method of performing types of anesthesia on the phantom. List the indications and contraindications.</p> <p>List: possible errors and complications</p>	<p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	
17.	Border control 1	<p>2 stages</p> <p>written work (testing)</p> <p>Priem prakticheskikh skilkov</p> <p>Detskaya terapicheskaya stomatologiya [Reception of practical skills</p>	<p>in Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Format of the event: written work, interactive feedback, practical skills reception.</p>
18.	Conducting anesthesia, concept, types. Tuberal anesthesia. Indications and contraindications. Target point, method of implementation. Innervation zone. Possible complications and errors.	<p>The student should know:</p> <p>Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Working on phantoms 3. Working in albums

		<p>medications, doses, and methods of treatment by age.</p> <p>Draw a method for performing a type of tuberal anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	
19.	Practicing practical skills.	<p>The student should know:</p> <p>Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.</p> <p>Draw a method for performing a type of tuberal anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Working on phantoms 3. Working in albums
20.	Infra-orbital anesthesia. Indications and contraindications. Target point, method of implementation. Blocking zone. Possible complications and errors.	<p>The student should know:</p> <p>Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Working on phantoms 3. Working in albums

		Sketch out the method of performing infra-orbital anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	
21.	Practicing practical skills.	The student should know: Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Sketch out the method of performing infra-orbital anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
22.	Incisive, palatal anesthesia. Indications and contraindications. Target point, method of implementation. Innervation zone. Possible complications and errors.	The student should know: Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

		Draw a technique for performing incisor or palatal anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.	
23.	Practicing practical skills.	The student should know: Methods of conducting anesthesia on the upper jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Draw a technique for performing incisor or palatal anesthesia in the album. Create a table of medications and doses. Create a table / diagram indications and contraindications	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Chelovek Publishing House, 2017.	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
24.	Guide anesthesia on the lower jaw. МандибулярнаяMandibular anesthesia. Indications and contraindications. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

		Draw a technique for performing a type of mandibular anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	
25.	Practicing practical skills.	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Draw a technique for performing a type of mandibular anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
26.	Guide anesthesia on the lower jaw. Torsus anesthesia. Indications and contraindications. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

		Draw a technique for performing a type of thoracic anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	
27.	Practicing practical skills.	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Draw a technique for performing a type of thoracic anesthesia in the album. Create a table of medications and doses. Make a table / scheme of indications and contraindications	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grgoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grgoryants A. A.-SPb: Chelovek Publishing House, 2017.	Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums
28.	Guide anesthesia on the lower jaw. Анестезия по Go-Gatesu anesthesia. Anesthesia by Vazirani-Akinosi (Akinosi). Indications and contraindications	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age.	for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).	

	cations. Target point. Possible complications and errors. Method of conducting. Possible errors and complications.	Draw the Go-Gates u method of anesthesia in the album. Anesthesia by Vazirani-Akinosi (Akinosi). Create a table of medications and doses. Make a table / scheme of indications and contraindications	Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Chelovek Publishing House, 2017.	
29.	Practicing practical skills.	The student should know: Methods of conducting anesthesia on the lower jaw in the age aspect. Indications and contraindications for anesthesia. List medications, doses, and methods of treatment by age. Draw the Go-Gates u method of anesthesia in the album. Anesthesia by Vazirani-Akinosi (Akinosi). To work me-out the method of performing types of anesthesia on the phantom. List the indications and contraindications. List: possible errors and complications	in Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Chelovek Publishing House, 2017.	
30.	Types of central (stem) anesthesia (by the method of administration) in maxillofacial practice in the age aspect. Target point. Blocking zone. Indications and contraindications in the age aspect.	The student should know: Classification of central (stem) anesthesia. Methods of anesthe-	for Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in dentistry and maxillofacial surgery / comp.: Grigoryants	Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums

	Method of conducting. Possible complications and errors.	<p>sia in the age aspect. Indications and contraindications for anesthesia.</p> <p>List: medications, doses, and methods of treatment by age.</p> <p>Draw in the album: the anatomy of the lower jaw, natural holes in the age aspect.</p> <p>Sketch out the procedure for performing anesthesia on the lower jaw in the album. Create a table of medications and doses. Create a table / chart of indications and contraindications</p>	<p>A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: publishing house Man, 2017.</p>	
31.	Practicing practical skills.	<p>The student should know: Classification of central (stem) anesthesia. Methods of anesthesia in the age aspect. Indications and contraindications for anesthesia.</p> <p>To work out the method of performing types of anesthesia on the phantom. List possible indications and contraindications. List: possible errors and complications</p>	<p>in Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide).</p> <p>Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p.</p> <p>Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Human Publishing House, 2017.</p>	<p>Formative assessment:</p> <ol style="list-style-type: none"> 1. TBL 2. Work on phantoms 3. Work in albums

32.	<p>Aboutбщее general anesthesia in surgical dentistry (outpatient, inpatient). Classification of general anesthesia. Indications and contraindications in the age aspect. Sedation. Medications used for general anesthesia.</p>	<p>The student should know: General anesthesia – definition, goals, and objectives. Types of general anesthesia in the age aspect (outpatient, inpatient). Sedation – definition, goals, and tasks. Indications and contraindications for general anesthesia, sedation. List: medications, doses, and methods of treatment by age. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova; AS-MOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Human Publishing House, 2017.</p>	<p>Formative assessment: 1. TBL 2. Working on phantoms 3. Working in albums</p>
33.	<p>Practicing practical skills.</p>	<p>The student should know: General anesthesia – definition, goals, and objectives. Types of general anesthesia in the age aspect (outpatient, inpatient). Sedation – definition, goals, and tasks. Indications and contraindications for general anesthesia, sedation. List: medications, doses, and methods of treatment by age. Create a table of medications and doses. Make a table / scheme of indications and contraindications</p>	<p>for Children's therapeutic dentistry [Text] / ed. Academician V. K. Leontiev, Professor L. P. Kiselnikova ; AS-MOK. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Grigoryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Grigoryants A. A.-SPb: Human Publishing House, 2017.</p>	<p>Formative assessment: 1. TBL 2. Work on phantoms 3. Work in albums</p>

34	Border control#2-2	stages written work (testing) Priem prakticheskikh skilkov Detskaya terapticheskaya stomatologiya [Reception of practical skills	in Children's therapeutic dentistry]. Academician V. K. Leontiev, Professor L. P. Kiselnikova; ASMOC. - 2nd ed., reprint. and add-ons. - Moscow: GEOTAR-Media, 2017. - 952 p.: ill. - (National guide). Surgical dentistry. Textbook / Ed. Afanasyeva V. V.-Moscow: GEOTAR-Media, 2016. - 400 p. Local anesthesia in stomatology and maxillofacial surgery / comp.: Goryants A. P., Marusov I. V., Fedosenko T. D., Antonova I. N., Goryants A. A.-SPb: Human Publishing House, 2017.	Format of the event: written work, interactive feedback.
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Team based learning – TBL

		%
Individual -- (IRAT)		40
Group -- (GRAT)		20
Appeal		20
Friend Evaluation (bonus)		20
		100%

Case-based learning CBL

		%
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1	Interpretation of survey data	10
2	Interpretation of physical examination data	10
3	Preliminary diagnosis, justification, DDh, examination plan	10
4	Interpretation of lab-instrumental examination	data 10
5	Clinical diagnosis, problem sheet	10
6	Management and treatment plan	10
7	Validity of drug selection and treatment regimen	10
8	Efficacy assessment, prognosis, prevention	10
9	Special problems and questions on the case	10
10	Rating of friends (bonus)	
		100%

Score-rating rating of the SRS-creative task (maximum 90 points) + bonuses for English language and time management

		10	8	4	2
1	Problem focus	Organized focused, highlights all questions related to the main identified problem with an understanding of the specific clinical situation	Organized, focused, highlights all questions related to the main identified problem, but there is no understanding of the specific clinical situation	Unfocused, Distraction to questions not related to the main identified problem	Inaccurate, misses the point, inappropriate data.

2	Informative, effective presentation	All the necessary information on the topic is fully conveyed in a free, consistent, logical manner The product form is adequately selected	All the necessary information is conveyed in a logical manner, but with minor inaccuracies	All the necessary information on the topic is presented chaotically, with minor errors	Important information on the topic is not reflected, gross errors
are not reflected 3	Reliability	The material is based on reliably established facts. Display of understanding by the level or quality of evidence	Some conclusions and conclusions are formulated based on assumptions or incorrect facts. There is no complete understanding of the level or quality of evidence	There is insufficient understanding of the problem, some conclusions and conclusions are based on incomplete and unproven data-questionable resources are used	Conclusions and conclusions are not justified or incorrect
4	Logic and consistency	The presentation is logical and consistent, has internal unity, the provisions in the product follow from each other and are logically interrelated	internal unity, product positions follow from one another, but there are inaccuracies	There is no consistency and logic in the presentation, but it is possible to track the main idea	Jumps from one to another, it is difficult to grasp the main idea
5	Literature analysis	Literary data are presented in a logical relationship, demonstrate a deep study of the main and additional information resources	Literary data demonstrate the study of the main literature	Literary data show the study of the main literature data is not always in place, does not support the consistency and evidence of statements	Inconsistency and randomness in the presentation of data, inconsistency No knowledge of the main textbook
6	Practical significance	High	Significant	Not enough	Not acceptable
7	Patient-oriented	High	Focused	Not enough	Not acceptable

8	Applicability in future practice	High	Applicable	Not enough	Not acceptable
9	Presentation clarity, report quality (speaker's assessment)	Correctly, all the features of Power Point or other e-gadgets are used to the point, fluency in the material, confident manner of presentation	Is overloaded or insufficiently used visual materials, incomplete knowledge of the material	Visual materials are not informative does not confidently report	Does not own the material, does not know how to present
it bonus	English/ Russian/Kazakh*	The product is fully delivered in English/Russian/Kazakh (checked by the head of the department) + 10-20 points depending on the quality	of the product prepared in English, submitted in Russian /kaz + 5-10 points depending on the quality (or vice versa)	When preparing the product, we used English-language sources + 2-5 points depending on the quality	
of the bonus	Time management**	Product delivered ahead of time 10 points	are awarded Product delivered on time – no points are awarded	Postponement of delivery that does not affect quality Minus 2 points	Delivered late Minus 10 points
Bonus	Rating***	Additional points (up to 10 points)	Outstanding work, for example: Best work in a group Creative approach Innovative approach to completing tasks At the suggestion of the group		
	<p>* - for Kaz/Rus groups-English; for groups studying in English - completing tasks in Russian or Kazakh</p> <p>*The deadline is determined by the teacher, as a rule - the day of border control</p> <p>** so, you can get the maximum 90 points, to get above 90-you need to show a result higher than expected</p>				

EVALUATION SHEET #1

Local anesthesia on the jaws (on a dummy)

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	Criteria for evaluating steps	Excellent	good	Acceptable	Requires correction	Unacceptable
1.	Level of understanding of the topic	10	8	6	4	0
2.	Ability to think logically	10	8	6	4	0
3.	Correctly performed the hand washing steps, put on gloves	10	8	6	4	0
4.	Correctly selected the anesthetic, filled the carpool syringe	10	8	6	4	0
5.	Correctly demonstrated empathy					
6.	Correctly selected the anesthesia method	10	8	6	4	0
7.	Correctly demonstrated the technique of performing anesthesia on the phantom	10	8	6	4	0
8.	Demonstrated proficiency in professional terminology	10	8	6	4	0
9.	Demonstrated the removal of gloves	10	8	6	4	0
10.	Demonstrated the general culture of speech/writing	10	8	6	4	0
	TOTAL	100	80	60	40	0